

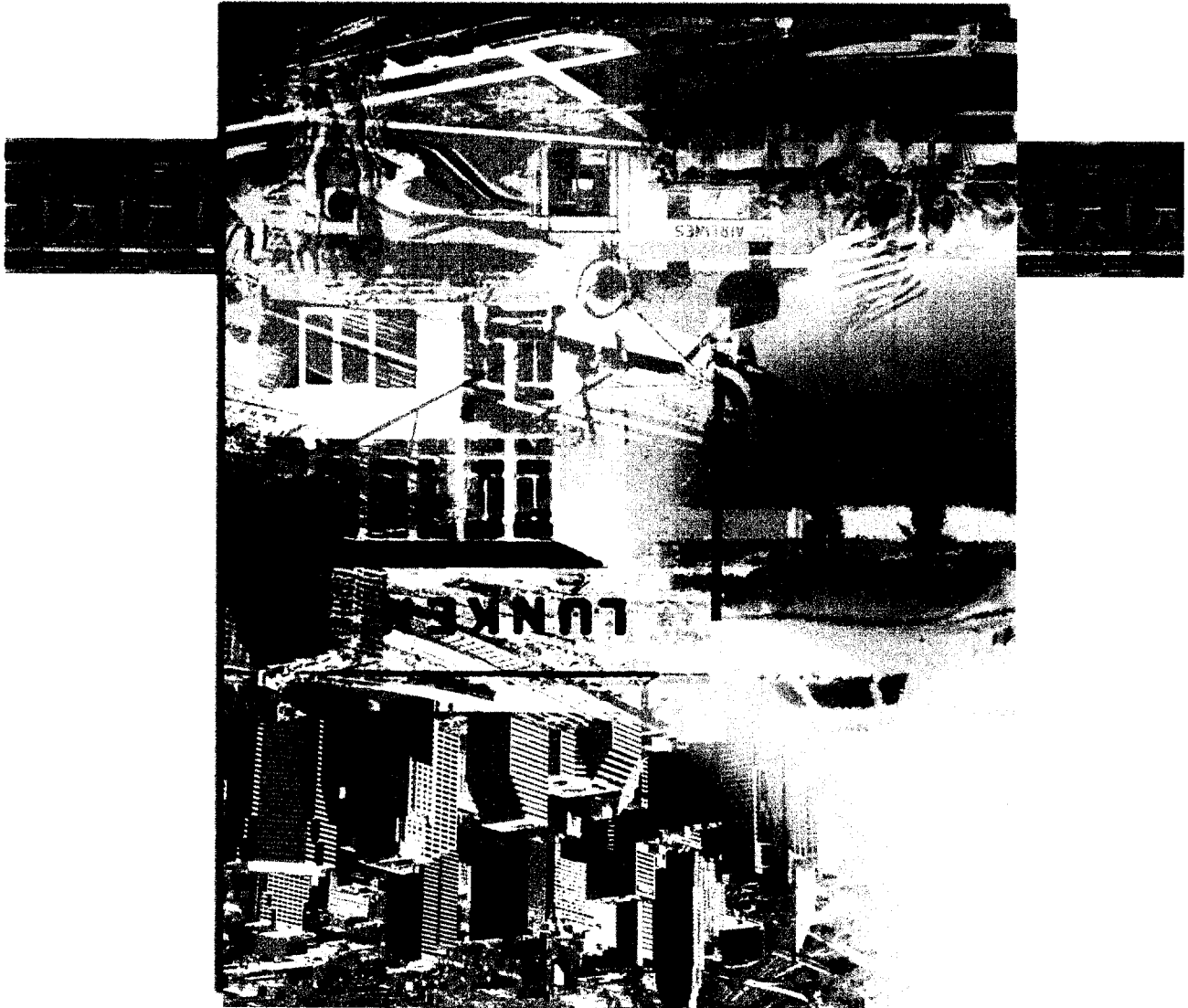


CINCINNATI MUNICIPAL - LUNKEN AIRPORT

SUBMITTED BY: DANIEL J. DICKTEN, AIRPORT MANAGER

APRIL 12, 2002

PROPOSAL UNDER THE SMALL COMMUNITY AIR SERVICE DEVELOPMENT PILOT PROGRAM
(DOCKET NUMBER OST-2002-11590)



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City of Cincinnati



Department of General Services
Division of General Aviation
Lunken Airport

Lunken Airport
262 Wilmer Ave.
Cincinnati, Ohio 45226
Phone 513-321-4132
FAX 513-871-6801

Kevin A. Shepard
General Services Director

Daniel J. Dickten
Airport Manager

SVC-124, Room PL-401
Department of Transportation
400 Seventh Street, Southwest
Washington, DC 20590
ATTN: Docket Operations & Media
Management Division

PROPOSAL UNDER THE SMALL COMMUNITY AIR SERVICE
DEVELOPMENT PILOT PROGRAM
DOCKET NUMBER OST-2002-11590
SUBMITTED BY: DAN DICKTEN, AIRPORT MANAGER
CINCINNATI MUNICIPAL-LUNKEN AIRPORT
CITY OF CINCINNATI

April 12, 2002

Dear Sirs,

Transmitted herewith are five copies plus the original request for federal assistance under the Small Community Air Service Development Pilot Program, for Cincinnati Municipal-Lunken Airport.

A consortium of local business and community representatives have encumbered funds for the local match for this grant. Please contact me at (513) 352-6340, for any additional needs or questions in regards to this application.

Sincerely,

Dan Dickten, Airport Manager

cc. Mr. J. Deatrick

CHECKLIST

Airport and Community Name	Cincinnati Municipal-Lunken Airport
Address	262 Wilmer Avenue Cincinnati, Ohio 45226
Contact person w/phone number	Dan Dickten, Airport Manager (512) 352-6340
Additional Community Members	The Observation Deck, Inc.
Address	262 Wilmer Avenue, Suite 21 Cincinnati, Ohio 45226
Contact persons w/phone numbers	Marc Louis, Mark Bishop (513) 321-4115
Project Sponsor	Same as Above
Project Proposal	
Project Description	Enclosed
Project Duration	Enclosed
Project Elements	Enclosed
Project Cost	\$ 500,000.00
Local Share/Private Funds	\$ 50,000.00
Federal Share	\$ 450,000.00
Total Cost	\$ 500,000.00
Proposed evaluation criteria	See page 2 of Questions and Answers, Item 3

INTRODUCTION

CINCINNATI MUNICIPAL-LUNKEN AIRPORT

Cincinnati Municipal-Lunken Airport is seeking Federal funding from the Small Community Air Service Development Pilot Program. We feel strongly that the immediate Tri-State region, including Northern Kentucky and Eastern Indiana, would greatly benefit from a scheduled air service at Lunken Airport. The following letter will address issues justifying our stance and plan of action for supporting such services.

Cincinnati Municipal-Lunken Airport is an established reliever airport for Greater Cincinnati – Northern Kentucky International Airport (CVG). Lunken's physical characteristics of the runway/taxiway system presently accommodate many larger aircraft designs and weights. Additionally, Lunken offers:

- 2 full-service FBO's complete with adequate fueling, de-icing services
- Fire Department on the Airport (Cincinnati Fire Department Station 18)
- Service and maintenance capabilities as necessary

More than two years ago a limited feasibility study was completed to determine if Scheduled Air Service could be successful at Lunken Airport. Our strategy included a questionnaire mailed to approximately 2,000 businesses (100 employees and greater) throughout the metropolitan Cincinnati area. Greater than ten-percent of those businesses responded to our survey. Follow-up telephone interviews were conducted with the results confirming that most businesses surveyed would utilize scheduled air service from Lunken.

Understanding that DOT gives priority consideration to communities meeting certain criteria, the survey focused on four primary areas. They were:

1. Convenience
2. Fares
3. Parking and transportation
4. Market segment analysis and public support

Our first issue addressed convenience to area travelers, both business and leisure. Cincinnati Municipal-Lunken Airport has never reached its potential in passenger activity. Yet, in short, over half of the nation's economic activity is accessible through general aviation at Lunken Airport more rapidly than by auto, and more directly than by major airlines (See attachment A: Economic Impact Report). Cincinnati Municipal-Lunken Airport is conveniently located just five miles due east of Downtown Cincinnati and is accessible to two major interstate highways (I-71 and I-275) along with highly utilized State Highways (Routes 52, 32 and 50). And, Lunken Airport is just two and one-half miles from the center of population of the community. Corporate Aviation Operations, Part 135 Charter Services, local pilots and aircraft owners find CMLA easily accessible for their use. Soon, the return of scheduled regional commuter service will once again show CMLA as a convenient destination.

The Boyd Group/ASRC recently completed a Scheduled Commercial Service Feasibility Study for CMLA. This study focused on the establishment of initial passenger service at Lunken with short-term prospects of service rather than long-term developmental issues. As such, it focused

primarily on regional service, not longer haul or higher capacity jet service. The establishment of such service involves building up the confidence of potential operators, especially at an airport such as Lunken where there is no recent history of passenger service.

Once Cincinnati Municipal-Lunken Airport establishes itself as a viable airport on a small-scale basis, the likelihood of attracting carriers with larger equipment, up to 60-seat regional jets, grows. The primary areas where Lunken will be able to establish a niche for service, however, is simply the convenience of the Airport and its proximity to potential passengers on the Ohio side of the river.

It is important to point out that CVG is located approximately eighteen miles from Downtown Cincinnati in Hebron, Kentucky. CVG is accessible from the Greater Cincinnati area via I-75 from the north and I-275 from the east (near Lunken Airport) and the far west (near the Indiana State line). These routes are frequently congested with traffic in Kentucky, as they are also major thoroughfares through the Cincinnati area.

Our second issue addressed airfares that are higher than the average fares for all communities. Area businesses and residents typically pay among the highest airfares in the nation with annual surveys placing CVG as the highest or second-highest fares in the U.S.A. The survey identified Lunken Airport as a potential low-fare airport with flights to common destinations and connecting flights within a 500-mile radius.

Third, a major issue concerned parking and transportation. Currently, Lunken Airport has available parking (and developable land) to provide parking for the planned air service along with a planned express-type hotel adjacent to the airport. Lunken Airport intends to offer parking at no cost to short-term and potentially long-term travelers. Additional parking serves the terminal businesses with corporate operators having their own parking facilities. Initial plans offer limited security surveillance by private security patrols working for the airport. Cincinnati Metro provides local bus service near the airport with the possibility of a future bus stop being added at the terminal once air service is established. Both Hertz and Enterprise car rentals operate from Lunken Airport with others, including limousine operators, nearby or offering service in the area.

Fourth, an analysis of the survey results concluded that the traveling public would utilize Cincinnati Municipal-Lunken Airport for a number of reasons including: 1) convenience of the airport to their place of business and residence, saving commuting time and now extensive delays in large-scale airport security screening; 2) ease of access to the aircraft from parking areas; 3) significantly lower air fares; 4) significant savings on parking charges; and 5) overall appeal of the local airport and personalized service not available at the larger airport.

Cincinnati Municipal-Lunken Airport, as part of this grant process, will establish a community consortium or will establish, a public-private partnership that will provide a portion of the cost of the activity to be assisted under the program from local sources other than airport revenues. This activity will facilitate air carrier service to the public; to insure that the assistance will provide material benefits to a broad segment of the traveling public, educational institutions, and other enterprises, whose access to the national air transportation system is limited whether by location or cost of air services.

Pan American Airways president, David Fink and Guilford Transportation Corporation Chairman, Tim Mellon, visited CMLA on March 1, 2002. At this meeting they verbally committed to airport and city representatives to operate commuter service from CMLA to

Chicago, and possibly Detroit, initially on 19-seat Jetstream 31 aircraft operated by Pan Am subsidiary Boston-Maine airways Express. The funding from this program will be used to offset the initial start-up costs of the operation of the scheduled service and to guarantee a profit to the operator for the first two yrs of the service. Additionally, there are at least two other potential commuter airline operators interested in establishing service at CMLA. This much needed service will benefit both business and leisure travelers in the Cincinnati area.

QUESTIONS & ANSWERS

Answers to Selected Questions

*The answers to these questions are based on our proposal
for the Development of Scheduled Air Service for
Cincinnati Municipal-Lunken Airport*

page 1

- A description of the community's existing service, including service frequency, direct and connecting destinations offered, available fares, and equipment types.

Presently, there is no scheduled service at Cincinnati Municipal-Lunken Airport. However, due to the nature and size of Lunken Airport, there is adequate equipment—both security and emergency, as well as available terminal and ramp space for a scheduled air service to operate out of Lunken.

- A synopsis of the community's historical service including destinations, traffic levels, service providers, and any extenuating factors that might have affected traffic in the past or that can be expected to influence service needs in the near to immediate term.

Lunken Airport was the City's main airport until the 1940's, when commercial operations were moved to Hebron, Kentucky to the newly built and larger Greater Cincinnati Airport. Since then, there have been many major improvements to Lunken including the construction of a 6,100 foot runway, expandable to 7,000 feet, (2 7-L), equipped with full ILS capabilities.

- An analysis of the community's air service needs or deficiencies, including a comparison of fares currently offered at the community to those offered at similar communities in similarly served markets.

For commercial travel, the entire Cincinnati area is serviced by the Greater Cincinnati, Northern Kentucky International Airport. Because Delta Airlines maintains a major hub at this airport, travelers pay among the highest airfares in the nation (second highest fares, to be exact).

- A strategic plan for meeting those needs through the pilot program, including the community's specific project goal and a timetable for attaining that goal. As noted above, we expect that self-sufficiency of the new or improved service will be an integral part of the community's goal. Applicants should not assume a multi-year award. Moreover, many communities might find that a single funding award for one year would be sufficient to finance their projects, or resolve their service or fare issue.

Money from this grant would be used to subsidize scheduled air service operations by Pan Am, Boston-Maine Airlines, for a period for up to three years.

- A description of the public-private partnership that will be responsible for the program developed at the local level. The partnership can either be an existing organization or an entirely new one. A public member of the organization should be identified as the community's sponsor to accept program reimbursements.

Our Community Airport Steering Committee is comprised of local neighborhood representatives and Cincinnati business leaders who work jointly for the betterment of Lunken Airport, and see the airport as an important advantage for the Cincinnati business community.

- An analysis of the funding necessary for implementation of the community's project, including federal and non-federal contributions. In calculating the non-federal contribution, we anticipate that we would not recognize contributions that simply continue already-existing programs or projects; ideally, the contributions should represent new financial resources devoted to attracting new or improved service, or addressing a specific high-fare issue. Furthermore, while we will consider proposals that employ in-kind trading (for example, reduced landing fees or terminal rent or non-cash transactions such as free advertising in exchange for reduced-fare travel), as a general matter, in-kind trading is frequently hard to qualify and may put a community at a competitive disadvantage when compared to other communities whose proposals include straight cash contributions.

(\$5000,000.00 total project dollars. \$450,000.00 = FAA, and \$50,000.00 = private/community)

- An explanation of how the community will provide assurances that its own funding contribution is spent in the manner proposed.

Our Community Airport Steering Committee will have established a co-treasurer, whose sole responsibility will be to report to the committee on all airport financial requests and to give final approval on all financial transactions.

- Descriptions of how the community or consortium of communities will monitor the success of the program and how they intend to notify the Department of critical milestones during the life of the program, including the need to modify, or discontinue funding.

Reports to our Steering Committee will be presented on a quarterly date with specific goals outlined and achievement dates defined. These goals will be designed collectively by airport management and steering committee representatives and benchmarked as a means of measuring success and achievement.

- We are not encouraging proposals that rely primarily on diverting passengers for whom a neighboring airport would be most convenient. Rather, we would encourage proposals that attempt to stimulate new demand at the local airport and make that service more attractive such that local passengers would no longer have the incentives to drive to a more distant airport. Proposals should clearly identify the target audience of all advertising and promotion efforts.

There is no question that Cincinnati travelers pay among the highest air fares in the country. It is also no secret that many air travelers drive to other airports in order to avoid the high ticket prices at CVG (see sample letter). Most of the people we spoke with in regards to our questionnaire, immediately identified the high ticket prices at CVG as their main reason for wanting to take advantage of Lunken Airport if a scheduled service became available. Among other advantages, Lunken is located within a fifteen minute drive for the great majority of business travelers, and our North Wing Terminal is presently equipped to immediately handle passenger service.

SAMPLE LETTER

THE CINCINNATI ENQUIRER

FRIDAY, FEBRUARY 8, 2002 57

Readers' V i s

Delta price hikes won't help business

TO THE EDITOR:

I am not surprised that Delta is reporting record losses. They have an extremely high cost structure, and have basically chosen to ignore how price impacts the law of supply and demand.

Since Sept. 11, demand is down. So, how has Delta responded? By continuing its premium pricing — its mid-week flight to Chicago of \$640 is \$100 more than it was just last week. There are probably many in monopolistic markets like Cincinnati who now drive to their destinations — or to another airport — solely because of excessive fares.

Perhaps Delta should rethink its pricing models and test to see if lower fares might stimulate sizeable increases in new and return business. How ironic that Southwest Airlines, the low-fare leader, was the only airline to show a profit during the fourth quarter while facing the exact same passenger perceptions about inconvenience and safety as Delta.

— Steve Coats
Anderson Township

Airline bailout is wrong approach

Regarding the letter "Airlines

this spectacle? How about those trying to show respect for the people who died, or those who want to tone down the violence in light of the attacks instead of glorifying it.

I thought after 911 some of the media would get the message that many of us want to remember what happened with respect for those who died and their families and learn that violence is not entertainment. Apparently they have forgotten already.

— Joe Luken
Westwood

Too many liberties taken with anthem

Once again, I have heard popular singers butcher the national anthem and "America the Beautiful" in the guise of "interpretation." Why can't these performers present the songs as written?

Mary J. Blige's interpretation of "America the Beautiful," with its trills and runs, sounded like she was searching for a note. If I hit enough of them, maybe I will get the right one. Mariah Carey, at times, sounded like an old "screech owl" that had just had its dinner stolen. This type of music may be OK for dinner clubs, but I

THE BOYD GROUP STUDY

Scheduled Commercial Service
Feasibility Study
Cincinnati Lunken Airport

Prepared by

The Boyd Group/ASRC, Inc.

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Evergreen, CO 80439

(303) 674-2000 Fax (303) 674-9996

February 1999

Note: This document is solely for the use of Cincinnati Lunken Airport. No other use is authorized. The data, analysis, and professional opinions contained herein are deemed accurate as of February 1999, however, they cannot be guaranteed. Further, due to the dynamic nature of the aviation industry actual operational results cannot be and are not guaranteed.

I. Project Background and Overview

The Boyd Group has been engaged by Cincinnati Lunken Airport to perform a feasibility study on commercial scheduled passenger air service at Cincinnati Municipal – Lunken Airport.

Currently, all scheduled service to and from the Greater Cincinnati area utilizes Cincinnati/Northern Kentucky International Airport (CVG), located in Covington, Kentucky, about 12 miles southwest of downtown Cincinnati. CVG offers a high level of nonstop service to both domestic and international destinations, is served by most major airline networks, and is a primary connecting hub for Delta Air Lines and its regional affiliate, Comair. Comair is the largest airline at CVG measured in terms of daily departures.

While CVG does offer tremendous benefits to the community thanks to its high level of nonstop service and overall system access, it does have shortcomings. The most common complaint with regard to CVG service is fare levels. Thanks to the dominance of Delta, and the lack of nonstop competitive service in most markets, airfares generally reflect Delta's basic fare structure. This fare structure is viewed as being tremendously high, especially for business fares. Combine this with the fact that Delta limits low-fare seats so that capacity is available for higher-revenue connecting passengers, and the result is that low fare seats are scarce.

***Cincinnati
area travelers
are
dissatisfied
with the high
fares and
inconvenience
of using CVG.***

The second shortcoming is that as CVG grows, it becomes more and more inconvenient for the passenger, especially on short haul trips. While those carriers flying from terminals one and two at CVG offer a more streamlined experience, the necessity of taking a train and possibly even a bus for Delta trips requires arrival at the airport at least **45 minutes** to an hour prior to departure. On trips of less than an hour flying time, the overall ratio of time spent on the ground to that in the air is quite high. This is exacerbated by the fact that Comair, whose gates require the longest trip ~~from~~ the terminal, operates many shorter haul flights.

The third shortcoming is that as Delta and Comair grow at CVG, the less attractive it becomes as a destination for potential competitors, low-fare or otherwise. Furthermore, because of its relatively small origin and destination demand level, limited inbound leisure potential, and plethora of alternative airports within a short driving distance, competitors are often reluctant to significantly commit assets to the Cincinnati market. This lack of competition results in less consumer choice in terms of schedules and fare offerings.

These shortcomings have left citizens of the greater Cincinnati area pondering possible solutions. One of these solutions is the establishment of scheduled commercial passenger flights from Lunken Airport.

Project Objective

The objective of this project is to perform a feasibility assessment of scheduled commercial passenger service at Cincinnati Lunken Airport (LUK). This study will focus on the shorter-term prospects of service – not long term development issues. As such, it focuses primarily on regional service, not longer-haul or higher-capacity jet service.

***This project
will analyze
Lunken as an
alternative to
CVG...***

This assessment will examine the following issues:

***In the context
of industry
realities.***

- The Lunken Alternative: focusing on the needs of the Cincinnati market, and the role that Lunken can play in meeting these needs.
- Service Parameters: the types of markets that make sense for initial service to and from Lunken.
- Market Opportunities: a specific analysis of each market that meets the service parameters, including potential airlines for the services.
- The Role of the Airport: what the airport must do to provide every opportunity for successful attraction and retention of scheduled service.

The final section of the document provides a summary and conclusion of the analysis.

II. The Lunken Alternative

In order for any airport to succeed, it must accomplish two things: first, it must serve the needs of the traveling public and second, it must generate enough demand to support profitable service for airlines. For major airports in major cities, this is pretty much a given. In order to travel by air, customers must use the airport available, and in order to serve these customers, airlines must fly there. This is not a revolutionary concept in these situations.

When expanding the envelope, however, the outcome of this basic formula becomes more problematic. In small communities, for example, the balance between customer demand and airline profit becomes more precarious. In many cases there is simply not enough demand for air travel to support scheduled service. Travelers must meet their needs by driving to larger airports in the region, and airlines access these customers by providing service at the larger facility.

A similar situation exists with regard to multiple airports serving the same area. Simply put, each airport **must** offer both travelers and airlines something that is more attractive ~~to~~ than is available at competing airports. For example, in the New York metropolitan area, many airlines serve LaGuardia, John F. Kennedy, and Newark airports. Each has positives and negatives with regard to the other.

For more than one airport in a metro area to succeed, each must offer unique benefits to airlines and travelers.

New York area airports provide an excellent example.

LaGuardia is the traditional domestic airport for New York. It is the most convenient airport to most of Manhattan, and as such, generates significant demand. The downsides of LaGuardia are that it is slot constrained, has a perimeter rule that limits the destinations that can be served, and cannot serve international flights (with the exception of those to and from Canada, Bermuda, and the Bahamas). JFK, on the other hand, has no perimeter rule and can handle international flights. It is significantly further from the City, however, and is also slot constrained during peak periods. Newark, by comparison, has no slot constraints, is available for international service, and **has** no perimeter rule, but is generally less convenient to use than LaGuardia.

The result of these advantages and disadvantages is that most major airlines serve all three of these airports in order to offer a comprehensive service pattern for the entire New York Metropolitan region. By not serving one of the airports, they limit both the access they offer to customers and the profits they can generate.



Of course, New York is not the only major metropolitan area to enjoy service **from** more than one airport. It should be noted, however, that all eight metropolitan areas served by multiple airports are significantly larger than the greater Cincinnati area.

...and All Are Much Larger Than Cincinnati

Metropolitan Area	Population
Los Angeles	14,924
New York	12,388
Chicago	7,758
San Francisco	5,538
Washington	4,537
Dallas/Ft. Worth	4,523
	4,320
	3,739
	1,596

This is not to say that a second gateway to the Cincinnati region will not work, only that it is prudent to manage expectations with regard to the potential of the idea. Lunken will not become Chicago Midway or Dallas Love anytime in the near future. But it can carve a successful niche if it focuses on the market segments where it can offer travelers an advantage.

The primary areas where LUK may be able to establish a niche for Cincinnati travelers are convenience and affordability. These are the areas in which it can best differentiate itself from the service being offered at CVG, and focusing on these strengths will provide the highest possible chance for Lunken service to be successful.

The Convenience Factor

As Cincinnati/Northern Kentucky International Airport has expanded, it has become increasingly inconvenient for local passengers, especially those whose flights are relatively short in duration. Although CVG is relatively convenient to downtown Cincinnati, especially compared to other cities' distance from their airports, the size of the airport dictates early arrivals in order to park (or return rental cars), check in, check baggage, and make it to the gate.

*Flying Comair
from CVG
reminds
travelers of a
not-so-old
movie title...*

**Planes,
Trains, and
Automobiles.**

While the process is more streamlined for the non-Delta carriers using terminals one and two, any Delta flight requires at least one segment on the underground train, and a Comair flight adds a bus ride on top of that. Based on this process, passengers must plan on arriving at the airport at least 45 minutes prior to departure in order to assure that they will not miss their flights. Assuming a door-to-door time of 25 minutes from a downtown location to CVG, travelers must plan on a minimum of one hour and ten minutes to reach their flight. This time grows longer as one moves further away from the airport, especially to the northeast of downtown.

Travel from Lunken would consume much less time. Barring unexpected traffic delays, travel time between downtown Cincinnati and Lunken has been measured at 10-12 minutes.

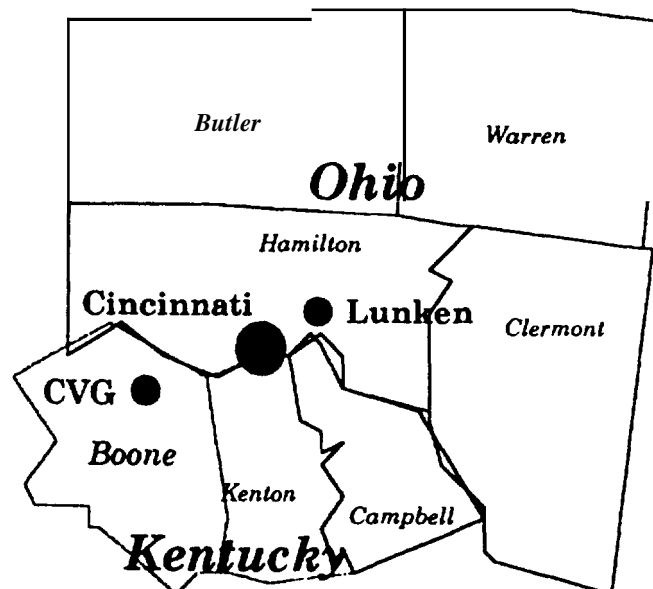
Even using **15 minutes as a conservative figure**, it is clearly more convenient than CVG.

A required arrival at the airport only 10 minutes prior to departure would be attractive to time sensitive business travelers.

The real time savings would come once at the airport, however. Parking is directly across the street from the terminal. All check-in, security, and waiting areas would be in the same building. Small aircraft would mean little congestion, and little, if any, time spent waiting in lines. Consequently, a departure ~~from~~ Lunken would require arrival at the airport **only 20 minutes** from scheduled departure in the worst case, and would usually be practical as little as 10 minutes prior to departure if no ticket changes or baggage check-in were required.

Based on these calculations, travel from Lunken, rather than CVG, can be expected to save travelers approximately **35 minutes** in ground time per departure. Since the times hold true on the inbound as well (because of the need to again take the bus and train, and wait for baggage), similar time savings are expected on arrival. This adds up to a total of one hour and ten minutes' total roundtrip time savings for a traveler from downtown Cincinnati.

Lunken Is More Convenient Than CVG To A Significant Portion of the Greater Cincinnati Region



It should be reemphasized that the time savings would be even greater for those travelers from areas northeast of downtown that effectively drive past Lunken on their way to CVG.

Lunken is well located to serve several important business and residential areas in and around Cincinnati. The first, of course, is downtown. LUK is more convenient than CVG to other important areas as well, including the affluent Indian Hill area. LUK is also highly convenient to the counties north and east of Cincinnati, including portions of Butler, Warren, and Clermont counties. These are higher income, growing areas. While Hamilton County has been steadily losing population and is expected to continue to do so, these counties are adding population. Both Butler and Clermont counties are experiencing growth of approximately **2%** per year, while Warren County growth is closer to **4%** per year, based on U.S. Census Data.

Lunken is more convenient than CVG for growing and prosperous parts of Butler, Warren, and Clermont counties.

These counties are also affluent. In 1993, the estimated median household income for the state of Ohio was \$30,896. In Butler County, it was **\$37,304**, in Clermont County, **\$33,248**, and in Warren County it was \$42,111. Hamilton County was well above the state average as well, at **\$37,203**.

While this data in and of itself does not ensure that people would use Lunken, it does indicate that Lunken would be an attractive alternative to CVG for a prospering portion of the Greater Cincinnati Metropolitan area.

Interviews with several major employers in the area confirm the convenience of LUK. The majority of businesses interviewed indicated that Lunken's location is more convenient for their company's travelers than CVG. Furthermore, all but one company said that they currently utilize LUK for corporate or charter traffic, providing further indication that **LUK** is in a convenient location.

III. Service Parameters

While longer-term objectives for Cincinnati Lunken may include the commencement of scheduled jet service, low-fare or otherwise, it is unrealistic to expect this to occur in the near future. The establishment of such service involves building up the confidence of potential operators, especially at an airport such as Lunken where there is no recent history of passenger service. Once Lunken is established as a viable airport on a small-scale basis, the likelihood of attracting carriers with larger equipment **grows**.

This report focuses on the establishment of initial passenger services at Lunken. Characteristics of such service include:

The Lunken service profile is frequent service, short haul markets, and smaller turboprop aircraft.

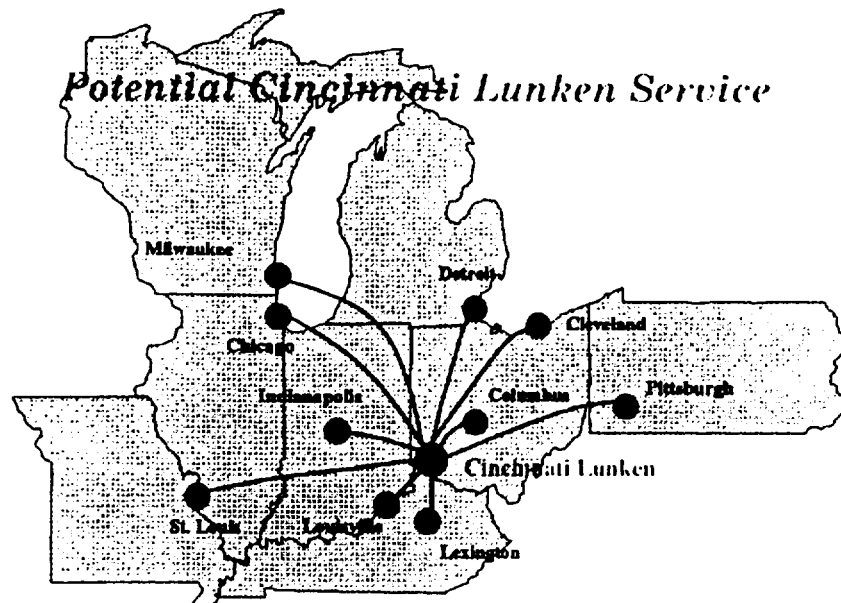
- ➔ **Short stage lengths.** As discussed earlier, one of the strongest selling points for Lunken service is simply the convenience of the airport. In reality, the magnitude of the transit time to and from the aircraft varies based on the length of the airline trip that is being taken. For example, a 35-minute time savings is of small concern when it leads to a 4-hour flight to Southern California. On the other hand, it can be quite significant if the flight is a one-hour segment to Cleveland. Thus, this study is limited to markets of fewer than **325** miles, or about an hour and a half block time for turboprop aircraft. It should be noted, however, that several destinations exist that may be too close for economical service. These are markets where the fare necessary to turn a profit is still too high to get people out of their cars.
- ➔ **Business-oriented schedules.** Convenience is most important to the time-sensitive business traveler. Any time that might be saved by utilizing LUK is negated if there is not a flight available that meets his or her needs. Consequently, if schedules are not adequate, there will be little incentive to use Lunken as opposed to CVG, or as opposed to driving.
- ➔ **Smaller turboprop aircraft.** While jet equipment is always preferable to turboprops, it is also significantly more expensive and usually holds more people. The

*19-seat
turboprop
aircraft are
the most
appropriate
airplanes for
Lunken
initially.*

investment required by an airline to provide jet service at Lunken would be much higher than that needed for turboprop service, and the higher capacity would require more passengers to be economically viable. In the initial phase, The Boyd Group believes that 19-seat turboprop aircraft are the most appropriate for the types of markets being considered for Lunken service.

IV. Market Opportunities

Based on the parameters outlined in the previous section, The Boyd Group has identified ten markets that may hold potential for successful Lunken service.



These markets can generally be divided into two categories: hub and spoke, and point to point.

Note: unless otherwise specified, the financial calculations in this section are based upon four roundtrip flights operating six days per week, a **47%** load factor and an estimated **seat-mile** cost of 18.5 cents, utilizing a 19-seat aircraft such as a Jetstream 31 or Beech 1900D.

Hub and Spoke Market

Hub and spoke markets are those where local traffic is supplemented by connecting traffic to onward cities. There are numerous hubs within a 325-mile radius of Cincinnati where Lunken could potentially be added as a spoke. The upside to these markets is that the hub carriers are natural targets for the service. The downside is that they are usually

already entrenched at **CVG** and that they are unlikely to offer a fare structure any lower than those already in place.

Chicago

<i>Lunken - Chicago Midway Service</i>	
Mileage	264
Current Estimated O&D Demand	236,000
Annual Passengers Needed	22,525
% of Current Demand	9.5%
Breakeven Average Fare	\$103
Potential Operators	Chicago Express, New
Connecting Potential	Medium

Of all the markets being analyzed in this study, Chicago has the highest level of base passenger demand, about **650** passengers per day each way. Consequently, the share of traffic needed to support Lunken service would be relatively small, equal to about 9.5% of existing local traffic, assuming an average one-way fare of \$103.

Chicago, with demonstrated passenger demand despite high fares, is an excellent candidate for Lunken service.

Service to Midway would also hold reasonable potential to attract connecting traffic. Chicago Express, the existing carrier most likely to be interested in operating the service, is a code-share partner with ATA. Both these carriers are low-fare operators, and would offer connecting service to popular destinations such as Dallas/Ft. Worth, Denver, Los Angeles, Phoenix, and San Francisco.

Alternatively, a new independent carrier could carry local traffic as well as double-ticketing connections to ATA or Southwest, which has a large presence at Midway.

Generally, it would be expected that both business and leisure travelers would utilize the service for local travel, while most connecting passengers would be price-sensitive leisure passengers. In the survey of local businesses, Chicago was named as the most popular short-haul destination.

Vanguard's new CVG-MDW service, with 737 jets, presents a challenge.

One recent development that could hurt the chances of such service is the announcement that Vanguard Airlines will

commence service between Chicago Midway and CVG four times per day with 737 jets. Vanguard is a low-fare carrier. Having the alternative of taking such service out of CVG, on a jet, is likely to reduce the overall attraction of having turboprop service ~~from~~ Lunken;

Cleveland

<i>Lunken - Cleveland Service</i>	
<i>Overview</i>	
Mileage	221
Current Estimated O&D Demand	76,000
Annual Passengers Needed	22,525
% of Current Demand	<u>29.6%</u>
Breakeven Average Fare	\$86
Potential Operators	Continental Express, New
Connecting Potential	High (COEx Only)

Local
**Cincinnati-
Cleveland
traffic is held
back due to
high fare
levels in the
market.**

Cleveland offers the promise of both relatively high local traffic demand and the traffic generating capability of Continental's hub operation. In order to breakeven, the service would need to generate passenger totals approximately 30% of that existing in the local market today.

If Continental Express operated the service, both local and connecting passengers could be accommodated. Because of the hub at CLE, it is estimated that only 50% of these passengers would be local, with the rest being connections at Cleveland Hopkins. This would significantly expand the number of destinations accessible through Lunken.

Continental **Express** service is problematic, however. The primary reason is that it is already established at CVG. If it only served CLE, a convincing argument could be put forth that it could do better at LUK. Unfortunately, it has small jet service to ~~from~~ CVG to its hubs in Newark and Houston as well. It is highly unlikely that it would have any interest at all in splitting its operation between the two airports.

Once again, another alternative would be to attract a new carrier to provide service. Cleveland could be an ideal market for such a service. The primary reason is because current travel in the market has no doubt been held back

because of high fare levels. Both Continental and Delta want **CVG-CLE** to feed longer-haul trips, not carry low-fare local traffic. Lower fares are likely to stimulate additional demand.

Furthermore, double-ticket connection opportunities would exist due to Southwest Airlines' and US Airways MetroJets' presence at Hopkins.

Detroit

<i>Lunken - Detroit Service</i>	
<i>Overview</i>	
Mileage	229
Current Estimated O&D Demand	65,000
Annual Passengers Needed	22,525
% of Current Demand	34.7%
Breakeven Average Fare	\$89
Potential Operators	Northwest Airlink, New
Connecting Potential	High (NWA Only)

Although it has a large hub at DTW, Northwest is unlikely to dispatch 30-seat SAAB 340s to Lunken and leave the rest of its operation at CVG.

Once again, Detroit is a strong local traffic market from Cincinnati, but the hub carrier, Northwest, is well entrenched at CVG, with service not only to DTW, but to Memphis and Minneapolis/St. Paul as well. Furthermore, the smallest aircraft that Northwest Airlink operates is the 30-seat SAAB 340, which is too much capacity for the Lunken market at this point in time.

Like Cleveland, however, the market holds potential for a new carrier focused on providing affordable access to local travelers and to those that might want to create a connection on Southwest Airlines. Current local market fares are very high, due to the pricing strategies of Delta and Northwest, and this has undoubtedly led to potential travelers in the market staying away. The convenience of using Lunken, combined with affordable fares, could make such service viable.

Milwaukee

<i>Lunken - Milwaukee Service</i>	
Mileage	318
Current Estimated O&D Demand	26,000
Annual Passengers Needed	22,525
% of Current Demand	86.6%
Breakeven Average Fare	\$124
Potential Operators	Skyway (Midwest Express)
Connecting Potential	High

Skyway has a very small presence at CVG, and it might be persuaded to shift its operation to Lunken.

Unlike other hub cities, there is a reasonable chance that Skyway, the regional affiliate of Midwest Express Airlines, might be convinced to switch its service from **CVG** to **LUK**. This is true for a couple of reasons. First, Milwaukee is the only hub that Skyway serves from CVG. It would not have to worry about splitting its operation. Second, Midwest Express has a very loyal customer base, and prides itself on high-quality service. If it could be convinced that Lunken service would be a further positive differentiating point, then it could certainly be interested.

Although Midwest Express' Milwaukee hub is not as big as the other hubs in the region, it does provide **good** connectivity to most major markets in the western United States, as well as to some regional markets. Consequently, it would not have to rely on local market stimulation to turn a profit. This is necessary, because Midwest Express and Skyway are not low fare carriers.

The Milwaukee local market is relatively small. It is not likely to be a market where fare cuts could generate significant increases in traffic. Consequently, it would not be a strong market for a new carrier.

Pittsburgh

<i>Lunken - Pittsburgh Service</i>	
<i>Overview</i>	
Mileage	256
Current Estimated O&D Demand	39,000
Annual Passengers Needed	22,525
% of Current Demand	57.8%
Breakeven Average Fare	\$100
Potential Operators	US Airways Express, New
Connecting Potential	High (US Express)

US Airways Express currently serves the PIT-CVG market, as well as the PHL-CVG and CLT-CVG markets. Because of this established service, it is unlikely that they would consider moving any of their operations to Lunken.

Pittsburgh is unlikely to generate enough local demand to support Lunken service.

Unfortunately, because of its relatively small size and the dearth of potential connecting low-fare service at PIT, it is not that attractive of a market for a new carrier, either. In order to be even modestly successful, a new carrier would have to stimulate purely local demand by almost 60%, at an average fare of \$100. This would be very difficult to accomplish, at least in the short term.

St. Louis

<i>Lunken - St. Louis Service</i>	
<i>Overview</i>	
Mileage	308
Current Estimated O&D Demand	47,000
Annual Passengers Needed	22,525
% of Current Demand	47.9%
Breakeven Average Fare	\$120
Potential Operators	TW Express, New
Connecting Potential	High (TWE)

TWA recently announced that it was lowering its overall fare structure in and out of Cincinnati. Touted as a permanent change, not a sale, the local walkup fare will now be \$99, with advance purchase fares decreasing from this point.

TWA has lowered CVG-STL fares to \$99 one way walkup. This is lower than a turboprop operator would have to charge from Lunken.

This is bad news for potential service **from** Lunken. First of all, TWA's jets have lower seat-mile costs than any 19-seater that could be flown from Lunken. **As** noted in the above table, a projected breakeven fare to **STL** would have to be in the \$120 range, **20%** more than **TWA's** new highest fare. Second, any constructed connection to Southwest at STL would be cheaper on TWA as well.

The combination of lower fares and jet service would more than outweigh any convenience of traveling from Lunken. Unless TWA changes its pricing strategy back to the old one sometime in the future, LUK-STL service is not possible.

Point-To-Point Markets

Routes that do not rely heavily on transfer traffic are termed point-to-point. These would not connect Cincinnati to another hub, and would rely on local and interline traffic to be successful. Potential Lunken point-to-point markets are Columbus (116 miles), Indianapolis (98 miles), Lexington (70 miles), and Louisville (83 miles).

Operating profitable air service in such short markets in the absence of hub traffic flows presents several challenges. First, the economics of operating such services result in higher operating costs. While variable costs such as fuel are lower, the fixed costs and airport costs are basically the same as for longer trips. This means seat mile costs are higher than on longer segments. This, then, necessitates higher per-mile fares. The real difficulty comes **when** customers must decide whether to pay the airfare (higher on a per seat basis) or simply drive. Add an hour and ten minutes to the trip on each end, plus aircraft taxi and possibly circling times, and the benefit from flying versus driving simply does not add up.

The Boyd Group has calculated estimated the actual local origin and destination air travel between Cincinnati and these cities (expressed on a per day each way basis):

Market	Daily Local Passengers Each Way
Louisville	16
Columbus	15
Indianapolis	10
Lexington	6

These numbers are far below those that would be required to profitably support scheduled air service in these markets.

It is true, of course, that these traffic totals have been generated at high fare levels, and that some stimulation would occur if they were lowered. Furthermore, with low fare levels, traffic could fly to Columbus, Indianapolis, and Louisville to connect with other low fare carriers and pay **less** than flying out of CVG.

It is highly unlikely, however, that traffic could be stimulated to such an extent that it would make service to these cities profitable. Even at fares averaging **\$75** or so (an absolute rock-bottom figure for a small aircraft on this type stage length), the airline would have to fill nine seats a flight to break even.

At four flights per day, this would result in **36** passengers per day, more than double the number of the highest demand market today. **An** airline could, of course, operate less than four flights, but in doing **so** they would limit the utility of the service as well as the number of connecting opportunities. **The** outcome **would** not change.

*Very rarely
will people fly
on trips that
take less than
2 1/2 hours to
drive,
regardless of
price.*

If it were offered, would some people love this service and pay for it? Undoubtedly. Would it pull enough people from their cars or stimulate enough raw demand to make it profitable? It is highly unlikely. With very few exceptions, it is virtually impossible to generate enough local traffic (at profitable fare levels) to support a flight in markets where drive time is under **2 1/2** hours. Remember, not only does the service have to be inexpensive, but also it has to offer a time savings (from home or office to final destination in the city) that offsets the cost of the ticket. Even with the added convenience of Lunken, the value proposition of such service is extremely thin.

V. The Role of the Airport

In order to attract and retain scheduled air service at Lunken, the airport itself must take certain steps to ensure that it is providing the best possible environment for the service to succeed. These include:

- ➔ Ensuring that the airport meets all applicable FAA requirements for the type of service offered. Currently, service by 30-seat and larger aircraft requires compliance with **FAR** Part 139, while low-frequency service with aircraft under 19-seats requires limited **FAR** Part 139 compliance. Currently Lunken meets the requirements for limited Part 139 approval. The airport may consider beginning to plan for full Part 139 compliance in order to accommodate growth that might occur in the future.
- ➔ Providing facilities that meet airlines' operating requirements. These include adequate space in the terminal for ticket counters, gate hold areas, office space, and baggage makeup. Furthermore, the airport must have adequate communications access to accommodate airlines' computer systems. On the ramp, there must be provisions for ground service equipment movement and storage, as well as for refueling.
- ➔ Ensuring that the airport's facilities meet airline's flight operations requirements, such as runway length and weight tolerance and navigational aids. Based on a review of existing facilities at Lunken, it appears as if these are currently adequate for turboprop and small jet service. The proposed extension of runway **2/20** to 7,000 feet and reinforcement to 171,000 pounds will be sufficient to accommodate up to 737/MD-80 size jets on all but the longest flights.
- ➔ In conjunction with the community, providing strong marketing support for the new service. **This** not only includes advertising support, but also efforts to identify, educate, and attract customers for the new service. **An** example of such an activity would be putting potential

Airlines want cost effective, efficient facilities that allow them to operate profitably - not expensive Taj Majals.

A 7,000-foot, 171,000-pound runway will handle most narrowbody jets on all but the longest flights.

corporate clients in contact with the carriers so that travel agreements could be negotiated.

- ➔ Maintaining low **costs** for the airline operators. Profit margins for smaller **carriers**, especially startups, are often very thin. The airport must contribute to the success of its tenants by ensuring that charges and fees remain as low as possible.
- ➔ Maintain and enhance the convenience of Lunken for passengers, so that it maintains its edge over **CVG** in this respect. This can include such measures as increasing available parking, instituting a rail/trolley link to downtown, or adding a business center with telephones, fax machines, and modem hookups.

The airport must also ensure that it remains convenient for passengers - or some of its coinpetitive edge may dissolve.

The overriding aspect of the airport's role in the process of attracting and retaining scheduled air service is its attitude. It must stand ready to do whatever it takes, within time and fiscal constraints, that it can to ensure that operators can succeed with new service.

VI. Summary and Conclusion

As is the case in any major project, the process of attracting scheduled air carrier service to Lunken **has** both opportunities and challenges. In order for scheduled service to become a reality, the magnitude of the opportunities must outweigh the magnitude of the challenges.

The key opportunities are:

- The lack of affordable air service in short-haul markets
- Suppressed demand due to high fares
- The convenience of Lunken versus CVG
- Economic growth in areas with easy access to Lunken
- Connectivity to other low-fare carriers such as Southwest
- Community support for alternatives to Delta and other major airlines

Scheduled Lunken service holds tremendous opportunities and challenges.

The key challenges are:

- The relatively small size of the Cincinnati market **vis-A-vis** the service available at CVG
- The presence of Delta's hub at **CVG**
- Passenger aversion to turboprop aircraft
- The trade-off between buying a ticket on a short-haul flight and driving
- The lack of recent scheduled service history at Lunken
- The conservative growth attitude of airlines in today's marketplace
- The difficulty of starting a new carrier

Under the right set of circumstances, it could work.

Based on the analysis contained in this document, The Boyd Group believes that the best avenues for scheduled passenger service are:

1. **Recruiting a new airline to provide high frequency, low-cost service to Chicago (midway), Cleveland, and Detroit.** These are the markets within a 325-mile radius that have the highest local demand. Today, the local traffic in

→
St. Louis

A new carrier, Skyway, and Chicago Express are the most promising airline alternatives in the short-term.

these markets is held back due to the lack of available low fares. **By making** reasonable fare levels available in these markets, a carrier would be expected not only to stimulate the local market, but also to offer the possibility of constructing double-ticket connections to low fare offerings at these airports.

2. **Convincing Skyway to shift its scheduled Milwaukee service from CVG to LUK.** Midwest Express (Skyways parent and code-share partner) pursues a corporate strategy of providing high levels of customer service. Consequently, there is a chance that it could be persuaded that the convenience of Lunken dovetails nicely with this strategy. While such service would not be low-fare, Midwest Express/Skyway enjoys a loyal customer base that would follow it to Lunken rather than choose another carrier from **CVG**. While local Milwaukee demand is rather **low**, the Midwest Express hub there offers connections to several popular destinations in the West as well as to regional markets in the Upper Midwest.
3. **Pursuing Chicago Express service to Chicago Midway.** Chicago Express would be a "double-bonus" operation for Lunken. Not only does the carrier pursue a low-fare strategy on its own, but it also code-shares with low-fare ATA at Midway, providing connections to destinations such as Dallas/Ft. **Worth**, Denver, Phoenix, Los Angeles, Las Vegas, and San Francisco. The combination of low local and connecting fares would likely stimulate traffic enough to make the service economically viable. The wild card in this scenario right now, however, is Vanguard's announced jet service in the **CVG-MDW** market. Although it does not offer the same level of connectivity at Midway, the higher capacity and lower seat mile costs of a jet could render competitive turboprop service from Lunken uneconomical.

While The Boyd Group certainly does not rule out the possibility of other services being viable, it believes that those outlined offer the strongest possibility of success.

**COMMUTER STUDY
FEASIBILITY STUDY**

COMMUTER SERVICE FEASIBILITY STUDY



CINCINNATI MUNICIPAL LUNKEN AIRPORT

JUNE 2001

REVISED SEPTEMBER, 2001



Brandstetter Carroll Inc.
Architects Engineers Planners





1. INTRODUCTION

The purpose of this study is to assess the feasibility of scheduled commercial airline passenger service at the City of Cincinnati Municipal Lunken Airport (LUK). The study focuses primarily on the role of the airport facility as it relates to scheduled commuter service.

LUK has been a key factor in air transportation for the City of Cincinnati and surrounding areas since its inception in 1928. American Airlines initiated operations at LUK in the 1930's. The airport was the primary air carrier facility for the Cincinnati/Northern Kentucky area until the late 1940's. Since that time, the facility has served the role of a general aviation (GA) reliever facility, with a majority of the LUK operations from corporate aircraft activity and negligible scheduled air passenger service activity.

The Cincinnati/Northern Kentucky International Airport (CVG) has assumed the role of air carrier service provider for the region, since its inception in 1947. While CVG offers a variety of flight schedules and access to the world's aviation transportation system, it does not cater to the local business traveler seeking destinations within a 350-mile radius of Cincinnati. Typical complaints are high fares and the time required to travel to/from the airport, return rental cars, parking, take shuttle buses/trains, etc. in order to make gate departure times for the scheduled service.

Since LUK is located approximately 5 miles from downtown Cincinnati, it offers a viable alternative to the business traveler seeking regional air transportation. Common regional destinations include Cleveland, Chicago, Detroit, Milwaukee, Pittsburgh, Knoxville, and St. Louis.

The LUK commuter service alternative would provide links to regional communities and would also reduce "ground" travel time, departure delays, and overall fares to the traveling public for this type of service.

The City of Cincinnati is currently researching the feasibility of this type of scheduled service at LUK. This type of service will likely provide economic benefit to the local area through operating fees generated by scheduled service (e.g. landing fees, passenger fees, fuel sales, etc.) that would directly benefit the airport. Further benefits to the local economy would include hotel, restaurant, travel, and merchandise revenues from travelers from other regional cities within the commuter airlines service network. A study conducted by the University of Cincinnati in 1999, estimates that LUK has provided economic impact to the Greater Cincinnati economy totaling more than \$235 million since its inception in 1928. The Airport also supports more than 3,700 jobs in the local area.

More recent discussions with Regional Air Carriers have prompted the Airport to further evaluate commuter service at Lunken. This type of service would likely include turbo-prop (jet-prop) aircraft such as the Beechcraft 1900D (19 seat), Bae-J31/32 (19 seat), Saab 340 (34 seat), Bombardier Dash 8 (37 seat), Embraer Brasilia (30 seat) or the Aerospatiale ATR (42-46 seats) as well as regional jet commuter aircraft such as the Bombardier RJ (50 seat), Embraer ER 135/145 (35/50 seat), or the Dornier 328 (32





seat). There are also some smaller commercial type aircraft that can be accommodated at Lunken. Among these are the Aerospatiale ATR 72 (64 seat), the Fokker 100 (95 seat) and the Boeing 737-200 (95 seat).

This vision of the airport can best be summarized by the Mission Statement for the Cincinnati Lunken Airport, as shown in Appendix A.

The following report information addresses issues such as estimated passenger enplanements/fares, the requirements of Federal Aviation Regulations (FAR) Part 139, as well as issues and improvements associated with the airport itself (i.e. terminal area, airfield facilities, security, etc.). The study concludes with a summary and general observations section.



The proposed area for commuter service is the north wing of the existing terminal building. A ramp expansion is currently underway to provide additional area for commuter aircraft operations. See Exhibits 1 and 2 on the following pages.

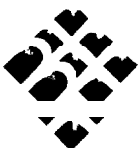


Exhibit 1



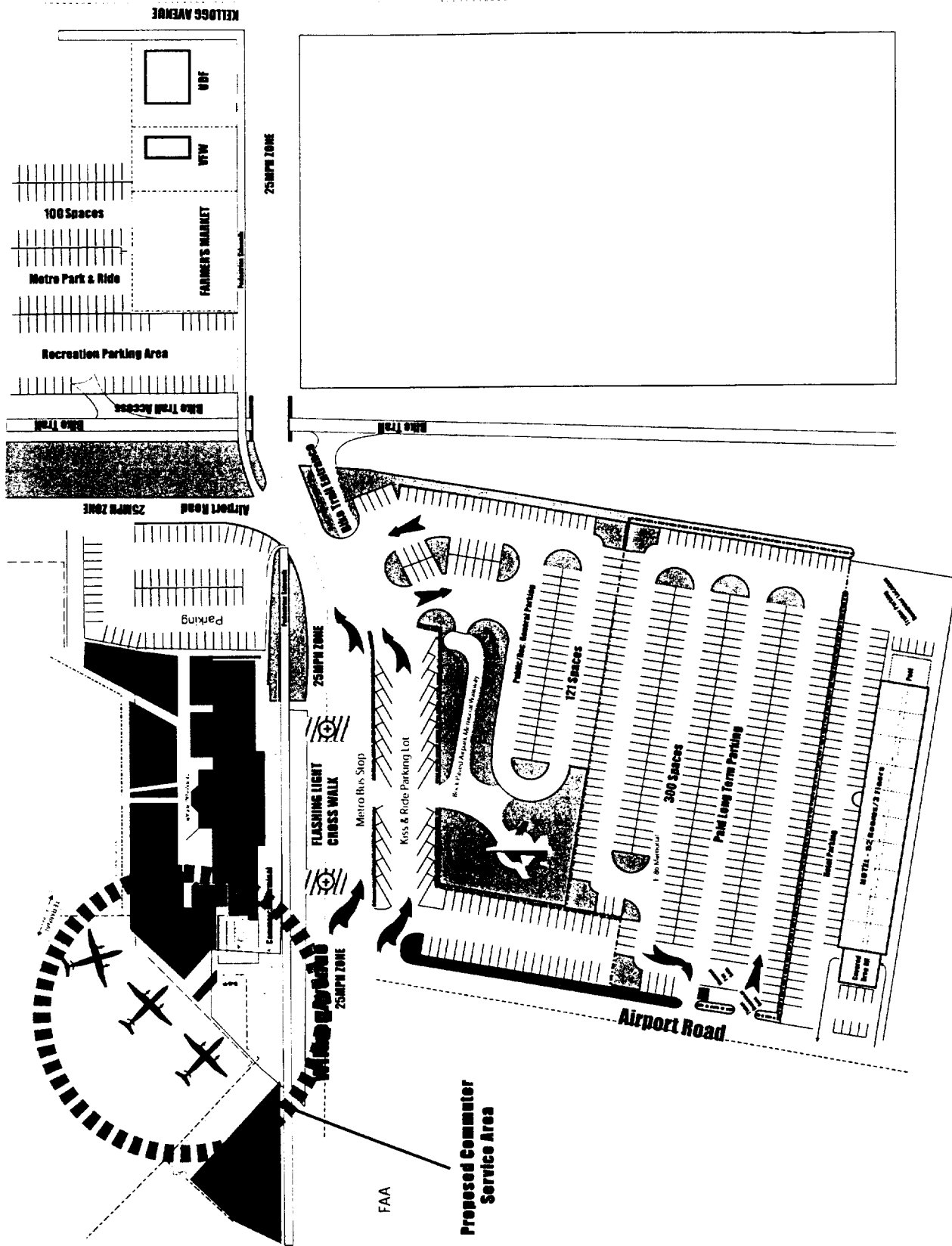


Exhibit 2

Commuter Service Area

Cincinnati Municipal Lunken Airport



II. REGIONAL COMMUTER SERVICE FEASIBILITY

A. Estimated Passenger Enplanements/Frequency/Fares

The City of Cincinnati hired a consultant to review the transportation facilities and needs of the region as it relates to potential commuter service at LUK. This study prepared by the Boyd Group/ASRC Inc. in 1999, identified four key market opportunities for a hub and spoke system and four key markets for point-to-point service.

The hub and spoke system relies on connections to other cities from the destination or arrival city from the hub. These are referred to as the spokes. The study identified four key markets from LUK including Chicago (Midway), Cleveland, Detroit, and Milwaukee.

The study included analysis of operating parameters such as days of operation/week (6 days), load factor (47%), estimated seat-mile costs (18.5 cents), utilizing 19-seat aircraft such as a Jetstream 31 or a Beech 1900D (both of which are turboprop aircraft). Upon review of the estimates and assuming nearly 22,500 annual passengers, the Boyd Group estimated breakeven average fares ranging from \$86 to \$124 for the previously mentioned hub and spoke markets.

These markets appear to have reasonable potential for connecting traffic and according to the study appear to offer the most potential for scheduled commuter airline (turboprop) service.

The other key markets reviewed by the Boyd Group included point-to-point service from LUK to cities approximately 100 miles from Cincinnati. These include Columbus, Indianapolis, Lexington, and Louisville.

As outlined in the study, the operating costs associated with this type of service are typically higher due to the shorter travel distance. While fuel costs would typically be less, the fixed costs associated with aircraft operations and costs associated with the airport facilities will be nearly the same. Thus the primary challenge associated with this type of service includes offering a decreased fare for the service that will offset the customer's decision to drive the route. The study further indicated that "very rarely will people fly on trips that take less than two and half hours to drive, regardless of price."

While this type of point-to-point service does not appear to be the most feasible, it may not be ruled out by a service provider depending on the demand for the service by the local community. An alternative may be to offer fewer flights to these point-to-point destinations.

In summary, the study determined the most feasible services would be hub and spoke service to key markets such as Chicago (Midway), Cleveland, Detroit, and Milwaukee.





B. Federal Aviation Regulations (FAR) Part 139 Requirements

Air carrier and commuter service airlines that use aircraft capable of carrying more than 30 passengers for scheduled or unscheduled passenger service must comply with Federal Aviation Regulations (FAR) Part 139 -- Certification and operations: Land Airports Serving Certain Air Carriers. Specific sections of FAR Part 139 that are applicable to Lunken Airport and scheduled passenger service include the following:

Lower frequency service with aircraft utilizing more than 30 seat aircraft (scheduled commuter FAR Part 121 service) requires a limited FAR Part 139 operating certificate, which LUK currently holds. (See Appendix B)

Published information from the FAA (pending NPRM) indicates that the 30 seat limit will change to any aircraft over 9 seats, thus requiring the airport to be full Part 139 compliant. It is the intent of the Airport to meet the requirements of a full FAR Part 139 certificate. These requirements are outlined as follows:

1. Subpart B – Certification

a. Section 139.101 Certification requirements: general.

- (1) “No person may operate a land airport in any State of the United States, the District of Columbia, or any territory or possession of the United States, serving any scheduled passenger operation of an air carrier operating an aircraft having a seating capacity of more than 30 passengers without an airport operating certificate, or in violation of that certificate, the applicable provisions of this part, or the approved airport certification manual for that airport.”

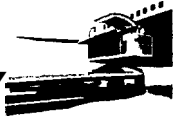
LUK has a current Airport Operating Certificate, as shown in Appendix B. A copy of the document is on file at the Airport Manager’s office.

b. Section 139.103 Application for certificate.

- (1) “Each applicant for an airport operating certificate or a limited airport operating certificate must submit an application, in a form and in the manner prescribed by the Administrator, to the Regional Airports Division Manager.”
- (2) “The application must be accompanied by two copies of an airport certification manual or airport certification specifications, as appropriate, prepared in accordance with Subpart C of this part.”

At this time, LUK is a Limited FAR Part 139 Certified facility that can accommodate scheduled air service of up to 30-seat aircraft, and as





such, has a corresponding Airport Certification Manual (ACM) on file. LUK has recently updated the ACM to reflect improvements being made at the Airport for compliance with FAR Part 739 requirements for scheduled air service of over 30 seat aircraft. A draft ACM has been submitted for approval and is currently under review by the FAA Great Lakes Region office in Chicago.

2. Subpart C – Airport Certification Manual (ACM) and Airport Certification Specifications

a. Section 139.203 Preparation of Airport Certification Manual.

- (1) “Each airport certification manual required by this part shall:
 - (a) Be typewritten and signed by the airport operator;
 - (b) Be in a form that is easy to revise;
 - (c) Have the date of initial approval or approval of the latest revision on each page or item in the manual and include a page revision log; and
 - (d) Be organized in a manner helpful to the preparation, review, and approval processes.”
- (2) “FAA Advisory Circulars in the 139 series contain standards and procedures for the development of airport certification manuals which are acceptable to the Administrator.”

As discussed, a Draft ACM has been submitted to the FAA for approval. The Draft ACM has also been reviewed in conjunction with this study. Comments are included in the following sections where the ACM is discussed in more detail.

b. Section 139.205 Contents of airport certification manual.

- (1) “Each airport certification manual required by this part shall include operating procedures, facilities and equipment descriptions, responsibility assignments, and any other information needed by personnel concerned with operating the airport in order to comply with:
 - (a) The provisions of Subpart D of this part; and
 - (b) Any limitations which the Administrator finds necessary in the public interest.





- (2) In complying with paragraph (1) of this section, the airport certification manual must include at least the following elements:
- (a) Lines of succession of airport operational responsibility.
 - (b) Each current exemption issued to the airport from the requirements of this part.
 - (c) Any limitations imposed by the Administrator.
 - (d) A grid map or other means of identifying locations and terrain features on and around the airport which are significant to emergency operations.
 - (e) The system of runway and taxiway identification.
 - (f) The location of each obstruction required to be lighted or marked within the airport's area of authority.
 - (g) A description of each movement area available for air carriers and its safety areas and each road described in Sec. 139.319(k) that serves it.
 - (h) Procedures for avoidance of interruption or failure during construction work of utilities serving facilities or nav aids which support air carrier operations.
 - (i) Procedures for maintaining the paved areas as required by Sec. 139.305.
 - (j) Procedures for maintaining the unpaved areas as required by Sec. 139.307.
 - (k) Procedures for maintaining the safety areas as required by Sec. 139.309.
 - (l) A description of, and procedures for maintaining, the marking and lighting systems as required by Sec. 139.311.
 - (m) A snow and ice control plan as required by Sec. 139.313.
 - (n) A description of the facilities, equipment, personnel, and procedures for meeting the rescue and



REGIONAL COMMUTER SERVICE FEASIBILITY



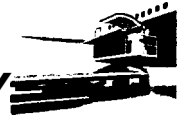
firefighting requirements in Secs. 139.317 and 139.319.

- (o) Procedures for complying with the requirements of Sec. 139.321 relating to hazardous substances and materials.
- (p) A description of, and procedures for maintaining, the traffic and wind direction indicators required by Sec. 139.323.
- (q) An emergency plan as required by Sec. 139.325.
- (r) Procedures for conducting the self-inspection program as required by Sec. 139.327.
- (s) Procedures for controlling ground vehicles as required by Sec. 139.329.
- (t) Procedures for obstruction removal, marking, or lighting as required by Sec. 139.331.
- (u) Procedures for protection of navigaids as required by Sec. 139.333.
- (v) A description of public protection as required by Sec. 139.335.
- (w) A wildlife hazard management plan as required by Sec. 139.337.
- (x) Procedures for airport condition reporting as required by Sec. 139.339.
- (y) Procedures for identifying, marking, and reporting construction and other unserviceable areas as required by Sec. 139.341.
- (z) Any other item which the Administrator finds is necessary in the public interest."

Upon review of the Draft Airport Certification Manual (or ACM) and in relation to the FARs, LUK has addressed the requirements of FAR Part 139.205. Specific comments for each sub-section are as follows:

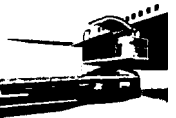
- (3) **Tab (1)-Personnel Information/Line of succession is provided. No comments.**





- (4) Tab (2)-Currently, no exemptions to FAR Part 139 exist for LUK. No comments.
- (5) Tab (3)-**Limitations** from FAR Part 139 are listed in this tab. No other comments.
- (6) Tab (4)-Grid Map is provided. No comments.
- (7) Tab (5)-Identification of Runways and Taxiways is provided. In addition, the Runways and Taxiways available for the existing (Limited) FAR Part 139 operation are identified.
- (8) Tab (6)-Obstruction locations are provided in an exhibit from the Airport Master Plan update in 1989. The City may consider updating this section if significant development or changes have occurred on and around the airfield within the past 12 years.
- (9) Tab (7)-Movement areas for air carriers are identified in this tab. No comments.
- (10) Tab (8)-NAVAIDS and procedures for avoidance of interruption or failure are outlined in this section. **No** comments.
- (11) Tab (9)-Procedures for maintaining paved areas are provided. No comments.
- (12) Tab (10)-Procedures for maintaining un-paved areas are provided. No comments.
- (13) Tab (11)-Procedures for maintaining safety areas are provided. No comments.
- (14) Tab (12)-**Marking** and Lighting is addressed. No comments.
- (15) Tab (13)- Snow and Ice Control. Update location of Maintenance facility once the **staff/equipment** has been moved to the new location on the airfield.
- (16) Tab (14)- Aircraft Rescue and Firefighting (ARFF). No comments.
- (17) Tab (15)- Hazardous Materials. Underground fuel storage tank permits are provided. Other fuel storage permits are the responsibility of the private owners on the airfield.





- (18) Tab (16)- Traffic and Wind Indicators. The Exhibit shows two lighted wind cones. One is located between the parallel runways, the other between Runway 3L-21R and the intersection of Taxiways A and C. However the text references one wind cone and 2 wind socks. This should be clarified in the ACM.
 - (19) Tab (17)-Airport Emergency Plan. There are two references to "Alert II" as shown in section 2 a) iv) on page 17.3. This appears to be a typographical reference, as the last reference should be listed as "Alert III".
 - (20) Tab (18)- Self Inspection Program. No comments.
 - (21) Tab (19)- Ground Vehicles. Consider adding a note regarding "Airport **Decal/markings** under item 1, "**Authorized** Ground Vehicles", subsection A.
 - (22) Tab (20)- Obstruction Marking. No comments.
 - (23) Tab (21)- Protection of NAVAIDS. No comments.
 - (24) Tab (22)- Public Protection. Reference FAR Part 139.335 on the tab cover page.
 - (25) Tab (23)- Wildlife Hazard Management. No comments.
- c. **Sec. 139.207 Maintenance of airport certification manual.**
- (1) Each holder of an airport operating certificate shall:
 - (a) Keep its airport certification manual current at all times;
 - (b) Maintain at least one complete and current copy of its approved airport certification manual on the airport;
 - (c) Furnish the applicable portions of the approved airport certification manual to the airport personnel responsible for their implementation;
 - (d) Make the copy required by paragraph (b) of this section available for inspection by the Administrator upon request; and





- (e) Provide the Administrator with one complete and current copy required by paragraph (b) of this section.

Upon receipt of approval from the FAA, and in accordance with the provisions of this section, the Airport will be required to update/maintain the ACM as necessary to the satisfaction of the (FAA) Administrator.

3. Subpart D – Operations

a. Sec. 139.30 Inspection authority.

- (1) Each certificate holder shall allow the Administrator to make any inspections, including unannounced inspections, or tests to determine compliance with this part.

Inspections are routinely performed by the FAA on a periodic basis. Copies of the inspection reports are maintained on file at the airport.

b. Sec. 139.303 Personnel.

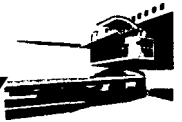
- (1) Each certificate holder shall maintain sufficient qualified personnel to comply with the requirements of its airport certification manual or airport certification specifications and the applicable rules of this part.

The Lunken Airport support staff as outlined in the draft ACM appears sufficient to comply with the requirements of this section. An organizational chart is also shown in the draft ACM.

c. Sec. 139.305 Paved areas.

- (1) Each certificate holder shall maintain, and promptly repair the pavement of, each runway, taxiway, loading ramp, and parking area on the airport which is available for air carrier use as follows:
 - (a) The pavement edges shall not exceed 3 inches difference in elevation between abutting pavement sections and between full strength pavement and abutting shoulders.
 - (b) The pavement shall have no hole exceeding 3 inches in depth nor any hole the slope of which from any point in the hole to the nearest point at the lip of the hole is 45 degrees or greater as measured





from the pavement surface plane, unless, in either case, the entire area of the hole can be covered by a 5-inch diameter circle.

- (c) The pavement shall be free of cracks and surface variations which could impair directional control of air carrier aircraft.
 - (d) Except as provided in paragraph (2) of this section, mud, dirt, sand, loose aggregate, debris, foreign objects, rubber deposits, and other contaminants shall be removed promptly and as completely as practicable.
 - (e) Except as provided in paragraph (2) of this section, any chemical solvent that is used to clean any pavement area shall be removed as soon as possible, consistent with the instructions of the manufacturer of the solvent.
 - (f) The pavement shall be sufficiently drained and free of depressions to prevent ponding that obscures markings or impairs safe aircraft operations.
- (2) Paragraphs (1)(d) and (1)(e) of this section do not apply to snow and ice accumulations and their control, including the associated use of materials such as sand and deicing solutions.
 - (3) FAA Advisory Circulars in the 150 series contain standards and procedures for the maintenance and configuration of paved areas which are acceptable to the Administrator.

As reported by the Airport Manager and as outlined in the draft ACM, Airport personnel perform a visual inspection of the paved areas on a daily basis during the daily safety inspection. LUK actively maintains its pavements through rehabilitation or replacement projects, surface treatments, and crack sealing. In addition, the airport receives Grant funding from Federal and State grant programs, as well as from local contributions for pavement maintenance and capital improvement projects. Per the Airport Manager, the pavements are maintained in accordance with FAA guidelines and provisions of this section.

d. Sec. 139.307 Unpaved areas.

- (1) Each certificate holder shall maintain and promptly repair the surface of each gravel, turf, or other unpaved runway,





taxiway, or loading ramp and parking area on the airport which is available for air carrier use as follows:

- (a) No slope from the edge of the full-strength surfaces downward to the existing terrain shall be steeper than 2:1.
 - (b) The full-strength surfaces shall have adequate crown or grade to assure sufficient drainage to prevent ponding.
 - (c) The full-strength surfaces shall be adequately compacted and sufficiently stable to prevent rutting by aircraft, or the loosening or buildup of surface material which could impair directional control of aircraft or drainage.
 - (d) The full-strength surfaces must have no holes or depressions which exceed 3 inches in depth and are of a breadth capable of impairing directional control or causing damage to an aircraft.
 - (e) Debris and foreign objects shall be promptly removed from the surface.
- (2) Standards and procedures for the maintenance and configuration of unpaved full-strength surfaces shall be included in the airport certification manual or the airport certification specifications, as appropriate, for compliance with this section.

*At this time, there are no known gravel, **turf**, or unpaved areas on the airfield available for air carrier use with the exception of the **turf** areas adjacent to the north wing of the terminal building. The City is currently in the process of preparing construction documents to have this area paved with both heavy duty (aircraft loaded) and light duty (vehicle loaded) pavements. This improvement project should be completed within the next six months.*

e. Sec. 139.309 Safety areas.

- (1) To the extent practicable, each certificate holder shall provide and maintain for each runway and taxiway which is available for air carrier use:
 - (a) If the runway or taxiway had a safety area on December 31, 1987, and if no reconstruction or significant expansion of the runway or taxiway was





begun on or after January 1, 1988, a safety area of at least the dimensions that existed on December 31, 1987; or

- (b) If construction, reconstruction, or significant expansion of the runway or taxiway began on or after January 1, 1988, a safety area which conforms to the dimensions acceptable to the Administrator at the time construction, reconstruction, or expansion began.
- (2) Each certificate holder shall maintain its safety areas as follows:
- (a) Each safety area shall be cleared and graded, and have no potentially hazardous ruts, humps, depressions, or other surface variations.
 - (b) Each safety area shall be drained by grading or storm sewers to prevent water accumulation.
 - (c) Each safety area shall be capable under dry conditions of supporting snow removal equipment, and aircraft rescue and firefighting equipment, and supporting the occasional passage of aircraft without causing major damage to the aircraft.
 - (d) No object may be located in any safety area, except for objects that need to be located in a safety area because of their function. These objects shall be constructed, to the extent practical, on frangibly mounted structures of the lowest practical height with the frangible point no higher than 3 inches above grade.
- (3) FAA Advisory Circulars in the 150 series contain standards and procedures for the configuration and maintenance of safety areas acceptable to the Administrator.

LUK maintains safety areas for its runways, taxiways, and apron areas in accordance with FAA Advisory Circulars. Runway safety areas extend 250 ft either side of the runway centerline, while taxiway safety areas extend 50 ft either side of the taxiway centerline as shown on the diagram provided in the draft ACM.



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f. Sec. 139.311 Marking and lighting.

- (1) Each certificate holder shall provide and maintain at least the following marking systems for air carrier operations on the airport:
 - (a) Runway markings meeting the specifications for the approach with the lowest minimums authorized for each runway.
 - (b) Taxiway centerline and edge markings.
 - (c) Signs identifying taxiing routes on the movement area.
 - (d) Runway holding position markings and signs.
 - (e) ILS critical area markings and signs.
- (2) Each certificate holder shall provide and maintain, when the airport is open during hours of darkness or during conditions below VFR minimums, at least the following lighting systems for air carrier operations on the airport:
 - (a) Runway lighting meeting the specifications for the approach with the lowest minimums authorized for each runway.
 - (b) One of the following taxiway lighting systems:
 - o Centerline lights.
 - e Centerline reflectors.
 - Edge lights.
 - o Edge reflectors.
 - (c) An airport beacon.
 - (d) Approach lighting meeting the specifications for the approach with the lowest minimums authorized for each runway, unless otherwise provided and maintained by the FAA or another agency.
 - (e) Obstruction marking and lighting, as appropriate, on each object within its authority, which constitutes an obstruction under Part 77 of this chapter. However, this lighting and marking is not required if





it is determined to be unnecessary by an FAA aeronautical study.

- (3) Each certificate holder shall properly maintain each marking or lighting system installed on the airport which is owned by the certificate holder. As used in this section, to "properly maintain" includes: To clean, replace, or repair any faded, missing, or nonfunctional item of lighting; to keep each item unobscured and clearly visible; and to ensure that each item provides an accurate reference to the user.
- (4) Each certificate holder shall ensure that all lighting on the airport, including that for aprons, vehicle parking areas, roadways, fuel storage areas, and buildings, is adequately adjusted or shielded to prevent interference with air traffic control and aircraft operations.
- (5) FAA Advisory Circulars in the **150** series contain standards and procedures for equipment, material, installation, and maintenance of light systems and marking listed in this section which are acceptable to the Administrator.
- (6) Notwithstanding paragraph (1) of this section, a certificate holder is not required to provide the identified signs in paragraph (1)(c) of this section until January 1, 1995. Each certificate holder shall maintain each marking system that meets paragraph (1)(c) of this section.

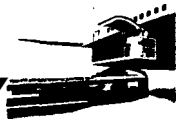
[Doc. No. 24812, 52 FR 44282, Nov. 18, 1987, as amended by Amdt. 139-15, 53 FR 40843, Oct. 18, 1988; Amdt. 139-19, 57 FR 15164, Apr. 24, 1992; Amdt. 139-20, 59 FR 7120, Feb. 14, 1994]

The draft ACM indicates that the LUK maintains markings and lighting for its runways, taxiways, and apron areas in accordance with FAA Advisory Circulars. In addition, obstruction lighting is provided for objects on the airfield that may penetrate the FAR Part 77 surfaces.

9. Sec. **139.313** Snow and ice control.
 - (1) Each certificate holder whose airport is located where snow and icing conditions regularly occur shall prepare, maintain, and carry out a snow and ice control plan.
 - (2) The snow and ice control plan required by this section shall include instructions and procedures for:



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- (a) Prompt removal or control, as completely as practical, of snow, ice, and slush on each movement area;
 - (b) Positioning snow off of movement area surfaces so that all air carrier aircraft propellers, engine pods, rotors, and wingtips will clear any snowdrift and snowbank as the aircraft's landing gear traverses any full strength portion of the movement area;
 - (c) Selection and application of approved materials for snow and ice control to ensure that they adhere to snow and ice sufficiently to minimize engine ingestion;
 - (d) Timely commencement of snow and ice control operations; and
 - (e) Prompt notification, in accordance with Sec. 139.339, of all air carriers using the airport when any portion of the movement area normally available to them is less than satisfactorily cleared for safe operation by their aircraft.
- (3) FAA Advisory Circulars in the 150 series contain standards for snow and ice control equipment, materials, and procedures for snow and ice control which are acceptable to the Administrator.

[Docket No. 24812, 52 FR 44282, Nov. 18, 1987; 53 FR 4258, Feb. 12, 1988]

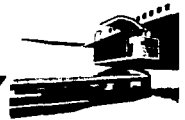
LUK provides snow and ice control with materials and equipment located at the airfield maintenance building. The Airport's snow and ice control fleet consists of snow plow vehicles, brooms, sprayer and spreaders. Sodium formate, potassium acetate, and sand are also stored at the maintenance building.

LUK also has a formal "snow removal plan" in place that outlines contact personnel, procedures for snow removal, condition reporting forms, etc. This information can be found in the draft ACM.

- h. Sec. 139.315 Aircraft rescue and firefighting: Index determination.
- (1) An Index is required by paragraph (c) of this section for each certificate holder. The Index is determined by a combination of:



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- (a) The length of air carrier aircraft expressed in groups; and
- (b) Average daily departures of air carrier aircraft.
- (2) For the purpose of Index determination, air carrier aircraft lengths are grouped as follows:
 - (a) Index A includes aircraft less than 90 feet in length.
 - (b) Index B includes aircraft at least 90 feet but less than 126 feet in length.
 - (c) Index C includes aircraft at least 126 feet but less than 159 feet in length.
 - (d) Index D includes aircraft at least 159 feet but less than 200 feet in length.
 - (e) Index E includes aircraft at least 200 feet in length.
- (3) Except as provided in Sec. 139.319(3), the Index required by Sec. 139.319 is determined as follows:
 - (a) If there are five or more average daily departures of air carrier aircraft in a single Index group serving that airport, the longest Index group with an average of 5 or more daily departures is the Index required for the airport.
 - (b) If there are less than five average daily departures of air carrier aircraft in a single Index group serving that airport, the next lower Index from the longest Index group with air carrier aircraft in it is the Index required for the airport. The minimum designated Index shall be Index A.

Aircraft Firefighting and Rescue requirements at LUK will most likely not exceed Index B, which includes aircraft between 90 and 126 ft in length. Typical aircraft in this index include the Fokker 100, BAE146, Boeing 737-200, etc. However, a commuter service provider using turboprop aircraft, such as a Jetstream 31 or 41, or a Beech 1900-D, would be less than 90_{ft} in length and thus requiring Index A firefighting/rescue equipment on the field.

- i. Sec. 139.317 Aircraft rescue and firefighting: Equipment and agents.





(1) The following rescue and firefighting equipment and agents are the minimum required for the Indexes referred to in Sec. 139.315:

(a) Index A: One vehicle carrying at least:

- a 500 pounds of sodium-based dry chemical or halon 1211; or
- a 450 pounds of potassium-based dry chemical and water with a commensurate quantity of **AFFF** to total 100 gallons, for simultaneous dry chemical and **AFFF** foam application.

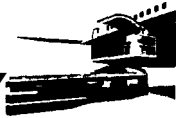
(b) Index B: Either of the following:

- a One vehicle carrying at least 500 pounds of sodium-based dry chemical or halon 1211, and 1,500 gallons of water, and the commensurate quantity of **AFFF** for foam production.
- a Two vehicles:
 - (i) One vehicle carrying the extinguishing agents as specified in paragraph (1)(a) or (b) of this section; and
 - (ii) One vehicle carrying an amount of water and the commensurate quantity of **AFFF** so that the total quantity of water for foam production carried by both vehicles is at least 1,500 gallons.

(c) Index C: Either of the following:

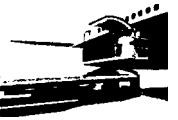
- a Three vehicles:
 - (i) One vehicle carrying the extinguishing agents as specified in paragraph (1)(a) or (b) of this section; and
 - (ii) Two vehicles carrying an amount of water and the commensurate quantity of **AFFF** so that the total quantity of water for foam production carried by all three vehicles is at least 3,000 gallons.





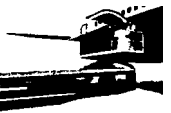
- Two vehicles:
 - (i) One vehicle carrying the extinguishing agents as specified in paragraph (2)(a) of this section; and
 - (ii) One vehicle carrying water and the commensurate quantity of AFFF so that the total quantity of water for foam production carried by both vehicles is at least 3,000 gallons.
- (d) Index D: Three vehicles:
 - One vehicle carrying the extinguishing agents as specified in paragraph (1)(a) or (b) of this section; and
 - Two vehicles carrying an amount of water and the commensurate quantity of AFFF so that the total quantity of water for foam production carried by all three vehicles is at least 4,000 gallons.
- (e) Index E: Three vehicles:
 - One vehicle carrying the extinguishing agents as specified in paragraph (1)(a) or (b) of this section; and
 - Two vehicles carrying an amount of water and the commensurate quantity of **AFFF** so that the total quantity of water for foam production carried by all three vehicles is at least 6,000 gallons.
- (f) Notwithstanding the provisions of paragraphs (a) through (e) of this section, any certificate holder whose vehicles met the requirements of this part for quantity and type of extinguishing agent on December 31, 1987, may comply with the Index requirements of this section by carrying extinguishing agents to the full capacity of those vehicles. Whenever any of those vehicles is replaced or rehabilitated, the capacity of the replacement or rehabilitated vehicle shall be sufficient to comply with the requirements of the required Index.





- (g) Foam discharge capacity. Each aircraft rescue and firefighting vehicle used to comply with Index **B**, **C**, **D**, or **E** requirements with a capacity of at least 500 gallons of water for foam production shall be equipped with a turret. Vehicle turret discharge capacity shall be as follows:
- Each vehicle with a minimum rated vehicle water tank capacity of at least 500 gallons but less than 2,000 gallons shall have a turret discharge rate of at least 500 gallons per minute but not more than 1,000 gallons per minute.
 - Each vehicle with a minimum rated vehicle water tank capacity of at least 2,000 gallons shall have a turret discharge rate of at least 600 gallons per minute but not more than 1,200 gallons per minute.
 - Notwithstanding the requirements of paragraph (g) of this section, any certificate holder whose aircraft rescue and firefighting vehicles are not equipped with turrets or do not have the discharge capacity required in this section, but otherwise met the requirements of this part on December 31, 1987, need not comply with paragraph (g) of this section for a particular vehicle until that vehicle is replaced or rehabilitated.
- (h) Dry chemical and halon 1211 discharge capacity. Each aircraft rescue and firefighting vehicle which is required to carry dry chemical or halon 1211 for compliance with the index requirements of this section must meet one of the following minimum discharge rates for the equipment installed:
- Dry chemical or halon 1211 through a hand line, 5 pounds per second.
 - Dry chemical or halon 1211 through a turret, 16 pounds per second.
- (i) Extinguishing agent substitutions. The following extinguishing agent substitutions may be made:





- Protein or fluoroprotein foam concentrates may be substituted for AFFF. When either of these substitutions is selected, the volume of water to be carried for the substitute foam production shall be calculated by multiplying the volume of water required for AFFF by the factor 1.5.
- Sodium- or potassium-based dry chemical or halon 1211 may be substituted for AFFF. Up to 30 percent of the amount of water specified for AFFF production may be replaced by dry chemical or halon 1211, except that for airports where such extreme climatic conditions exist that water is either unmanageable or unobtainable, as in arctic or desert regions, up to 100 percent of the required water may be replaced by dry chemical or halon 1211. When this substitution is selected, 12.7 pounds of dry chemical or halon 1211 shall be substituted for each gallon of water used for AFFF foam production.
- Sodium- or potassium-based dry chemical or halon 1211 may be substituted for protein or fluoroprotein foam. When this substitution is selected, 8.4 pounds of dry chemical or halon 1211 shall be substituted for one gallon of water for protein or fluoroprotein foam production.
- AFFF may be substituted for dry chemical or halon 1211. For airports where meteorological conditions, such as consistently high winds and precipitation, would frequently prevent the effective use of dry chemical or halon 1211, up to 50 percent of these agents may be replaced by water for AFFF production. When this substitution is selected, one gallon of water for foam production with the commensurate quantity of AFFF shall be substituted for 12.7 pounds of dry chemical or halon 1211.
- Potassium-based dry chemical may be substituted for sodium-based dry chemical. Where 500 pounds of sodium-based dry



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chemical is specified, 450 pounds of potassium-based dry chemical may be substituted.

- Other extinguishing agent substitutions acceptable to the Administrator may be made in amounts that provide equivalent firefighting capability.
- (j) In addition to the quantity of water required, each vehicle required to carry AFFF shall carry AFFF in an appropriate amount to mix with twice the water required to be carried by the vehicle.
- (k) FAA Advisory Circulars in the 150 series contain standards and procedures for AFFF equipment and agents which are acceptable to the Administrator.

[52 FR 44282, Nov. 18, 1987; 53 FR 4120 and 4258, Feb. 12, 1988]

Upon review of the draft ACM and based on discussions with the Airport Manager, LUK currently has the following aircraft rescue and firefighting equipment on the airfield:

- (1) *CR-1, 1970 International Magnum, Model 480, quick response vehicle; 1350 lbs of dry chemical (Purple K), 200 gal aqueous film-forming foam (AFFF). This vehicle has a handling discharge rate of 5 lbs/sec dry chemical and 80 gpm AFFF. The turret discharge rate is 25 lbs/sec (dry chem.) and 180 gpm AFFF.*
- (2) *1986 Oshkosh, Model T-3000, aircraft rescue and firefighting vehicle; 3000 gal of water, 410 gal AFFF, 500 lbs dry chemical (Purple K). This vehicle has a handling rate of 5 lbs/sec dry chemical and 60 gpm water/AFFF. The roof turret discharge rate is 16 lbdsec (dry chem.) and 375/750 gpm water/AFFF. Note: The dry chem. Package is in the process of being installed.*
- (3) *Water Tanker Truck #18; 2000 gal water*
- (4) *Cincinnati Fire Department (CFD) Engine #18.*

In addition to the ARFF vehicles on the airfield, the City of Cincinnati fire and ambulance services also respond to alerts.

See Appendix C for listing of rescue and firefighting equipment.





LUK therefore has the need for Index A rescue and firefighting service to accommodate commuter service with aircraft less than 90 ft in length. The airport exceeds this requirement for aircraft less than 90 ft and meets the requirement for larger aircraft (between 126 and 158 ft in length) by having Index C equipment on the airfield. Current Lunken Airport ARFF equipment including the CR1-International Magnum and Oshkosh T-3000 ARFF unit recently acquired from the Dayton International Airport actually meet the requirements of Index C type aircraft (between 126 and 158 ft in length).

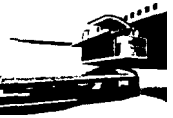
- j. Sec. 139.319 Aircraft rescue and firefighting: Operational requirements.
 - (1) Except as provided in paragraph (3) of this section, each certificate holder shall provide on the airport, during air carrier operations at the airport, at least the rescue and firefighting capability specified for the Index required by Sec. 139.317.
 - (2) Increase in Index. Except as provided in paragraph (3) of this section, if an increase in the average daily departures or the length of air carrier aircraft results in an increase in the Index required by paragraph (1) of this section, the certificate holder shall comply with the increased requirements.
 - (3) Reduction in rescue and firefighting. During air carrier operations with only aircraft shorter than the Index aircraft group required by paragraph (1) of this section, the certificate holder may reduce the rescue and firefighting to a lower level corresponding to the Index group of the longest air carrier aircraft being operated.
 - (4) Any reduction in the rescue and firefighting capability from the Index required by paragraph (1) of this section in accordance with paragraph (3) of this section shall be subject to the following conditions:
 - (a) Procedures for, and the persons having the authority to implement, the reductions must be included in the airport certification manual.
 - (b) A system and procedures for recall of the full aircraft rescue and firefighting capability must be included in the airport certification manual.



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- (c) The reductions may not be implemented unless notification to air carriers is provided in the Airport/Facility Directory or Notices to Airmen (NOTAM), as appropriate, and by direct notification of local air carriers.
- (d) Vehicle communications. Each vehicle required under Sec. 139.317 shall be equipped with two-way voice radio communications which provides for contact with at least:
 - Each other required emergency vehicle;
 - The air traffic control tower, if it is located on the airport; and
 - Other stations, as specified in the airport emergency plan.
- (e) Vehicle marking and lighting. Each vehicle required under Sec. 139.317 shall:
 - Have a flashing or rotating beacon; and
 - Be painted or marked in colors to enhance contrast with the background environment and optimize daytime and nighttime visibility and identification.
- (f) FAA Advisory Circulars in the 150 series contain standards for painting, marking and lighting vehicles used on airports which are acceptable to the Administrator.
- (g) Vehicle readiness. Each vehicle required under Sec. 139.317 shall be maintained as follows:
 - The vehicle and its systems shall be maintained so as to be operationally capable of performing the functions required by this subpart during all air carrier operations.
 - If the airport is located in a geographical area subject to prolonged temperatures below 33 degrees Fahrenheit, the vehicles shall be provided with cover or other means





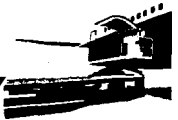
to ensure equipment operation and discharge under freezing conditions.

- e Any required vehicle which becomes inoperative to the extent that it cannot perform as required by Sec. 139.319(h)(1) shall be replaced immediately with equipment having at least equal capabilities. If replacement equipment is not available immediately, the certificate holder shall so notify the Regional Airports Division Manager and each air carrier using the airport in accordance with Sec. 139.339. If the required Index level of capability is not restored within **48** hours, the airport operator, unless otherwise authorized by the Administrator, shall limit air carrier operations on the airport to those compatible with the Index corresponding to the remaining operative rescue and firefighting equipment.

(h) Response requirements.

- e Each certificate holder, with the airport rescue and firefighting equipment required under this part and the number of trained personnel which will assure an effective operation, shall:
 - (i) Respond to each emergency during periods of air carrier operations; and
 - (ii) When requested by the Administrator, demonstrate compliance with the response requirements specified in this section.
- e The response required by paragraph (i)(1)(ii) of this section shall achieve the following performance:
 - (i) Within 3 minutes from the time of the alarm, at least one required airport rescue and firefighting vehicle shall reach the midpoint of the farthest runway serving air carrier aircraft from its assigned post, or reach any other specified point of comparable distance on the movement area





which is available to air carriers, and begin application of foam, dry chemical, or halon 1211.

(ii) Within 4 minutes from the time of alarm, all other required vehicles shall reach the point specified in paragraph (i)(2)(i) of this section from their assigned post and begin application of foam, dry chemical, or halon 1211.

(i) Personnel. Each certificate holder shall ensure the following:

- All rescue and firefighting personnel are equipped in a manner acceptable to the Administrator with protective clothing and equipment needed to perform their duties.
- All rescue and firefighting personnel are properly trained to perform their duties in a manner acceptable to the Administrator. The training curriculum shall include initial and recurrent instruction in at least the following areas:

(i) Airport familiarization.

(ii) Aircraft familiarization.

(iii) Rescue and firefighting personnel safety.

(iv) Emergency communications systems on the airport, including fire alarms.

(v) Use of the fire hoses, nozzles, turrets, and other appliances required for compliance with this part.

(vi) Application of the types of extinguishing agents required for compliance with this part.

(vii) Emergency aircraft evacuation assistance.

(viii) Firefighting operations.





- (ix) Adapting and using structural rescue and firefighting equipment for aircraft rescue and firefighting.
- (x) Aircraft cargo hazards.
- (xi) Familiarization with firefighters' duties under the airport emergency plan.
- All rescue and firefighting personnel participate in at least one live-fire drill every 12 months.
- After January 1, 1989, at least one of the required personnel on duty during air carrier operations has been trained and is current in basic emergency medical care. This training shall include 40 hours covering at least the following areas:
 - (i) Bleeding.
 - (ii) Diopulmonary resuscitation.
 - (iii) Shock.
 - (iv) Primary patient survey.
 - (v) Injuries to the skull, spine, chest, and extremities.
 - (vi) Internal injuries.
 - (vii) Moving patients.
 - (viii) Burns.
 - (ix) Triage.
- Sufficient rescue and firefighting personnel are available during all air carrier operations to operate the vehicles, meet the response times, and meet the minimum agent discharge rates required by this part;
- Procedures and equipment are established and maintained for alerting rescue and firefighting personnel by siren, alarm, or other means acceptable to the



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Administrator, to any existing or impending emergency requiring their assistance.

- k. Emergency access roads. Each certificate holder shall ensure that roads which are designated for use as emergency access roads for aircraft rescue and firefighting vehicles are maintained in a condition that will support those vehicles during all-weather conditions.

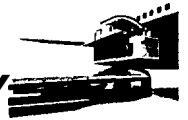
[Docket No. 24812, 52 FR 44282, Nov. 18, 1987; 53 FR 4258, Feb. 12, 1988, as amended by Amdt. 139-15, 53 FR 40843, Oct. 18, 1988; Amdt. 139-16, 54 FR 39295, Sept. 25, 1989]

As discussed, the equipment outlined in section 139.317 meets Index A, B, and C requirements. Per the Airport Manager, a reduction in the level of service provided is not anticipated. The equipment is maintained in good condition by the City of Cincinnati Fleet Services or approved contractors, and is operational per the requirements of this section and the Airport Manager. Flashing lights, rotating beacons, radios, appropriate painting and markings, are provided for the equipment as outlined in this section. Since the equipment is located on the airfield, the response times should be less than the requirements of this section. The ARFF station ~~is~~ manned by City of Cincinnati Fire Department (CFD) Station #18 personnel. The on-airport CFD personnel are familiar with the layout and operation of the airport and are trained in the operation of ARFF vehicles and aircraft rescue and firefighting techniques. Protective clothing is provided for up to nine emergency response personnel. This information is further detailed in the draft ACM.

The (CFD) is planning to send first response ARFF personnel to a certified training school off site. Recurrent training. CFD personnel are looking for an on site for training arrangement offered by one of the certified schools. Training should be received and index level achieved before conducting scheduled commercial services of over 30 seats.

- l. Sec. 139.321 Handling and storing of hazardous substances and materials.
 - (1) Each certificate holder which acts as a cargo handling agent shall establish and maintain procedures for the protection of persons and property on the airport during the handling and storing of any material regulated by the Hazardous Materials Regulations (49 CFR Part 171, et

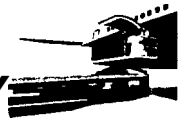




seq.), that is, or is intended to be, transported by air. These procedures shall provide for at least the following:

- (a) Designated personnel to receive and handle hazardous substances and materials.
 - (b) Assurance from the shipper that the cargo can be handled safely, including any special handling procedures required for safety.
 - (c) Special areas for storage of hazardous materials while on the airport.
- (2) Each certificate holder shall establish and maintain standards acceptable to the Administrator for protecting against fire and explosions in storing, dispensing, and otherwise handling fuel, lubricants, and oxygen (other than articles and materials that are, or are intended to be, aircraft cargo) on the airport. These standards shall cover facilities, procedures, and personnel training and shall address at least the following:
- (a) Grounding and bonding.
 - (b) Public protection.
 - (c) Control of access to storage areas.
 - (d) Fire safety in fuel farm and storage areas.
 - (e) Fire safety in mobile fuelers, fueling pits, and fueling cabinets.
 - (f) After January 1, 1989, training of fueling personnel in fire safety in accordance with paragraph (e) of this section.
 - (g) The fire code of the public body having jurisdiction over the airport.
- (3) Each certificate holder shall, as a fueling agent, comply with and, except as provided in paragraph (h) of this section, require all other fueling agents operating on the airport to comply with the standards established under paragraph (b) of this section and shall perform reasonable surveillance of all fueling activities on the airport with respect to those standards.





- (4) Each certificate holder shall inspect the physical facilities of each airport tenant fueling agent at least once every 3 months for compliance with paragraph (2) of this section and maintain a record of that inspection for at least 12 months. The certificate holder may use an independent organization to perform this inspection if:
 - (a) It is acceptable by the Administrator; and
 - (b) It prepares a record of its inspection sufficiently detailed to assure the certificate holder and the FAA that the inspection is adequate.
- (5) The training required in paragraph (2)(f) of this section shall include at least the following:
 - (a) At least one supervisor with each fueling agent shall have completed an aviation fuel training course in fire safety which is acceptable to the Administrator.
 - (b) All other employees who fuel aircraft, accept fuel shipments, or otherwise handle fuel shall receive at least on-the-job training in fire safety from the supervisor trained in accordance with paragraph (5)(a) of this section.
- (6) Each certificate holder shall obtain certification once a year from each airport tenant fueling agent that the training required by paragraph (5) of this section has been accomplished.
- (7) Unless otherwise authorized by the Administrator, each certificate holder shall require each tenant fueling agent to take immediate corrective action whenever the certificate holder becomes aware of noncompliance with a standard required by paragraph (b) of this section. The certificate holder shall notify the appropriate FAA Regional Airports Division Manager immediately when noncompliance is discovered and corrective action cannot be accomplished within a reasonable period of time.
- (8) A certificate holder need not require an air carrier operating under Part 121 or Part 135 of this chapter to comply with the standards required by this section.
- (9) FAA Advisory Circulars in the 150 Series contain standards and procedures for the handling and storage of

8



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hazardous substances and materials which are acceptable to the Administrator.

[52 FR 44282, Nov. 18, 1987; 53 FR 4120, Feb. 12, 1988, as amended by Amdt. 139-15, 53 FR 40843, Oct. 18, 1988; Amdt. 139-16, 54 FR 39295, Sept. 25, 1989]

The Airport does not currently own or maintain a fuel farm or conduct fueling activities. The Fixed Base Operator (FBO) as well as some corporate hangar facilities own, maintain, and conduct fueling operations on the airfield. It is the responsibility of the FBO and the private owners to comply with State and Federal laws for storing and handling hazardous materials or substances.

Specific information relating to storing, signage, handling techniques, training and inspections can be found in the draft ACM. The City of Cincinnati Fire Station #18 also provides inspection of fuel facilities on behalf of the airport.

m. Sec. 139.323 Traffic and wind direction indicators.

(1) Each certificate holder shall provide the following on its airport:

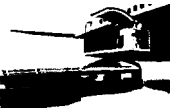
(a) A wind cone that provides surface wind direction information visually to pilots. For each airport in a Class B airspace area, supplemental wind cones must be installed at each runway end or at least at one point visible to the pilot while on final approach and prior to takeoff. If the airport is open for air carrier operations during hours of darkness, the wind direction indicators must be lighted.

(b) For airports serving any air carrier operation when there is no control tower operating, a segmented circle around one wind cone and a landing strip and traffic pattern indicator for each runway with a right-hand traffic pattern.

[Dkt. 24812, 52 FR 44282, Nov. 18, 1987, as amended by Amdt. 139-18, 56 FR 65664, Dec. 17, 1991]

A standard lighted wind cone is provided between the parallel runways. Wind direction and velocity equipment is located at a remote site with read-out information relayed directly to the Air Traffic Control Tower (ATCT). Air carrier operations will not be conducted while the ATCT is not operating, therefore the segmented circle is not necessary. A





segmented circle must be added at a later date if operations are planned during ATCT closure. Another alternative may include negotiating with the FAA for longer, possibly 24-hour ATCT service if planned operations are anticipated after the current 11:00 PM ATCT closure time.

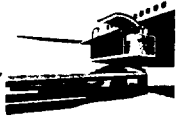
- n. Sec. 139.325 Airport emergency plan.
 - (1) Each certificate holder shall develop and maintain an airport emergency plan designed to minimize the possibility and extent of personal injury and property damage on the airport in an emergency. The plan must include:
 - (a) Procedures for prompt response to all of the emergencies listed in paragraph (b) of this section, including a communications network; and
 - (b) Sufficient detail to provide adequate guidance to each person who must implement it.
 - (2) The plan required by this section must contain instructions for response to:
 - (a) Aircraft incidents and accidents;
 - (b) Bomb incidents, including designated parking areas for the aircraft involved;
 - (c) Structural fires;
 - (d) Natural disaster;
 - (e) Radiological incidents;
 - (f) Sabotage, hijack incidents, and other unlawful interference with operations;
 - (g) Failure of power for movement area lighting; and
 - (h) Water rescue situations.
 - (3) The plan required by this section must address or include:
 - (a) To the extent practicable, provisions for medical services including transportation and medical assistance for the maximum number of persons that can be carried on the largest air carrier aircraft that the airport reasonably can be expected to serve;





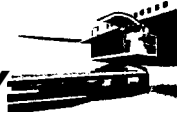
- (b) The name, location, telephone number, and emergency capability of each hospital and other medical facility, and the business address and telephone number of medical personnel on the airport or in the communities it serves, agreeing to provide medical assistance or transportation;
 - (c) The name, location, and telephone number of each rescue squad, ambulance service, military installation, and government agency on the airport or in the communities it serves, that agrees to provide medical assistance or transportation;
 - (d) An inventory of surface vehicles and aircraft that the facilities, agencies, and personnel included in the plan under paragraphs (3)(b) and (3)(c) of this section will provide to transport injured and deceased persons to locations on the airport and in the communities it serves;
 - (e) Each hangar or other building on the airport or in the communities it serves that will be used to accommodate uninjured, injured, and deceased persons;
 - (f) Crowd control, specifying the name and location of each safety or security agency that agrees to provide assistance for the control of crowds in the event of an emergency on the airport; and
 - (g) The removal of disabled aircraft, including to the extent practical if possible the name, location and telephone numbers of agencies with aircraft removal responsibilities or capabilities.
- (4) The plan required by this section must provide for:
- (a) The marshalling, transportation, and care of ambulatory injured and uninjured accident survivors;
 - (b) The removal of disabled aircraft;
 - (c) Emergency alarm systems; and
 - (d) Coordination of airport and control tower functions relating to emergency actions.





- (5) The plan required by this section shall contain procedures for notifying the facilities, agencies, and personnel who have responsibilities under the plan of the location of an aircraft accident, the number of persons involved in that accident, or any other information necessary to carry out their responsibilities, as soon as that information is available.
- (6) The plan required by this section shall contain provisions, to the extent practicable, for the rescue of aircraft accident victims from significant bodies of water or marsh lands adjacent to the airport which are crossed by the approach and departure flight paths of air carriers. A body of water or marsh land is significant if the area exceeds one-quarter square mile and cannot be traversed by conventional land rescue vehicles. To the extent practicable, the plan shall provide for rescue vehicles with a combined capacity for handling the maximum number of persons that can be carried on board the largest air carrier aircraft that the airport reasonably can be expected to serve.
- (7) Each certificate holder shall:
 - (a) Coordinate its plan with law enforcement agencies, rescue and fire fighting agencies, medical personnel and organizations, the principal tenants at the airport, and all other persons who have responsibilities under the plan;
 - (b) To the extent practicable, provide for participation by all facilities, agencies, and personnel specified in paragraph (g)(1) of this section in the development of the plan;
 - (c) Ensure that all airport personnel having duties and responsibilities under the plan are familiar with their assignments and are properly trained;
 - (d) At least once every 12 months, review the plan with all of the parties with whom the plan is coordinated as specified in paragraph (g)(1) of this section, to ensure that all parties know their responsibilities and that all of the information in the plan is current; and
 - (e) Hold a full-scale airport emergency plan exercise at least once every 3 years.





- (8) FAA Advisory Circulars in the 150 Series contain standards and procedures for the development of an airport emergency plan which are acceptable to the Administrator.

[52 FR 44282, Nov. 18, 1987; 53 FR 4258, Feb. 12, 1988]

Airport Management has prepared an Airport Emergency Plan (AEP) as outlined in the draft ACM that addresses specific issues as outlined in this section including aircraft incidents/accidents, bomb incidents, structural fires, natural disasters, etc. The plan also identifies appropriate contact Agencies and telephone numbers for emergency situations.

- o. Sec. 139.327 Self-inspection program.
 - (1) Each certificate holder shall inspect the airport to assure compliance with this subpart:
 - (a) Daily, except as otherwise required by the airport certification manual or airport certification specifications;
 - (b) When required by any unusual condition such as construction activities or meteorological conditions that may affect safe air carrier operations; and
 - (c) Immediately after an accident or incident.
 - (2) Each certificate holder shall provide the following:
 - (a) Equipment for use in conducting safety inspections of the airport;
 - (b) Procedures, facilities, and equipment for reliable and rapid dissemination of information between airport personnel and its air carriers;
 - (c) Procedures to ensure that qualified inspection personnel perform the inspections; and
 - (d) A reporting system to ensure prompt correction of unsafe airport conditions noted during the inspection.
 - (3) Each certificate holder shall prepare and keep for at least 6 months, and make available for inspection by the Administrator on request, a record of each inspection





prescribed by this section, showing the conditions found and all corrective actions taken.

- (4) FAA Advisory Circulars in the 150 series contain standards and procedures for the conduct of airport self-inspections which are acceptable to the Administrator.

[52 FR 44282, Nov. 18, 1987; 53 FR 4120, Feb. 12, 1988]

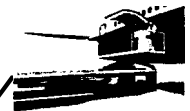
Per the Airport Manager, the facility implemented a self-inspection program several years ago. This includes a daily inspection performed by airport personnel. The Airport is also subject to periodic inspections by the FAA.

P. Sec. 139.329 Ground vehicles.

(1) Each certificate holder shall:

- (a) Limit access to movement areas and safety areas only to those ground vehicles necessary for airport operations;
- (b) Establish and implement procedures for the safe and orderly access to, and operation on, the movement area and safety areas by ground vehicles, including provisions identifying the consequences of noncompliance with the procedures by an employee, tenant, or contractor;
- (c) When an air traffic control tower is in operation, ensure that each ground vehicle operating on the movement area is controlled by one of the following:
 - Two-way radio communications between each vehicle and the tower,
 - An escort vehicle with two-way radio communications with the tower to accompany any vehicle without a radio, or
 - Measures acceptable to the Administrator for controlling vehicles, such as signs, signals, or guards, when it is not operationally practical to have two-way radio communications with the vehicle or an escort vehicle;





- (d) When an air traffic control tower is not in operation, provide adequate procedures to control ground vehicles on the movement area through prearranged signs or signals;
- (e) Ensure that each employee, tenant, or contractor who operates a ground vehicle on any portion of the airport that has access to the movement area is familiar with the airport's procedures for the operation of ground vehicles and the consequences of noncompliance; and
- (f) On request by the Administrator, make available for inspection any record of accidents or incidents on the movement areas involving air carrier aircraft and/or ground vehicles.

[Docket No. 24812, 52 FR 44282, Nov. 18, 1987, as amended by Amdt. No. 139-17, 55 FR 48214, Nov. 19, 1990]

The Airport currently maintains and uses ground vehicles on the airfield. These vehicles are clearly identified with Lunken Airport / City of Cincinnati markings, unit numerals, and flashing lights. The vehicles are equipped with two-way radios and communicate with the Air Traffic Control Tower (ATCT) when operating on the aircraft operations areas (AOA). Additional detail on ground vehicle communication/access/control is identified in the draft ACM.

The airport has implemented a pass system for tenants with the need to access non-movement and movement areas. A driver's training course is also conducted by the airport and is required before a pass will be issued to any tenant, operator, etc. This includes aircraft tugs, fuel trucks, service vehicles, etc.

q. Sec. 139.331 Obstructions.

- (1) Each certificate holder shall ensure that each object in each area within its authority which exceeds any of the heights or penetrates the imaginary surfaces described in Part 77 of this chapter is either removed, marked, or lighted. However, removal, marking, and lighting is not required if it is determined to be unnecessary by an FAA aeronautical study.

Known obstructions, as identified in the Airport Master Plan Study update (1989), FAA /ODOT inspection forms, and as identified in the draft ACM are either removed, marked or lighted (with red





obstruction lights). Additional information listing obstructions, location, and elevation can be found in the ACM.

r. Sec. 139.333 Protection of nav aids.

(1) Each certificate holder shall:

- (a) Prevent the construction of facilities on its airport that, as determined by the Administrator, would derogate the operation of an electronic or visual nav aid and air traffic control facilities on the airport;
- (b) Protect, or if the owner is other than the certificate holder, assist in protecting, all nav aids on its airport against vandalism and theft; and
- (c) Prevent, insofar as it is within the airport's authority, interruption of visual and electronic signals of nav aids.

The airport management is committed to protection of Navigational Aids or NAVAIDS as outlined in the draft ACM. Construction on the airfield requires the preparation and submittal of FAA form 7460-1 "Notice of Proposed Construction/Alteration". Airport utility plans are kept on file at the facility and are made available for contractors, designers, planners in an effort to protect existing NAVAIDS and utilities.

s. Sec. 139.335 Public protection.

(1) Each certificate holder shall provide:

- (a) Safeguards acceptable to the Administrator to prevent inadvertent entry to the movement area by unauthorized persons or vehicles; and
- (b) Reasonable protection of persons and property from aircraft blast.
- (c) Fencing meeting the requirements of Part 107 of this chapter in areas subject to that part is acceptable for meeting the requirements of paragraph (1)(a) of this section.

The Airport currently has security fencing around the perimeter of the airport to keep the unauthorized personnel or vehicles from inadvertently or intentionally accessing the movement areas or AOA. The fencing consists of 10ft high



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chain link along the levee side of the airport, and 8 ft high chain link around the outer perimeter (Wilmer Road and Airport Road). Outer perimeter gates as well as signage indicating Restricted Area or Authorized Personnel Only are provided.

- t. Sec. 139.337 Wildlife hazard management.
 - (1) Each certificate holder shall provide for the conduct of an ecological study, acceptable to the Administrator, when any of the following events occurs on or near the airport:
 - (a) An air carrier aircraft experiences a multiple bird strike or engine ingestion.
 - (b) An air carrier aircraft experiences a damaging collision with wildlife other than birds.
 - (c) Wildlife of a size or in numbers capable of causing an event described in paragraph (1) (a) or (b) of this section is observed to have access to any airport flight pattern or movement area.
 - (2) The study required in paragraph (1) of this section shall contain at least the following:
 - (a) Analysis of the event which prompted the study.
 - (b) Identification of the species, numbers, locations, local movements, and daily and seasonal occurrences of wildlife observed.
 - (c) Identification and location of features on and near the airport that attract wildlife.
 - (d) Description of the wildlife hazard to air carrier operations.
 - (3) The study required by paragraph (a) of this section shall be submitted to the Administrator, who determines whether or not there is a need for a wildlife hazard management plan. In reaching this determination, the Administrator considers:
 - (a) The ecological study;
 - (b) The aeronautical activity at the airport;
 - (c) The views of the certificate holder;





- (d) The views of the airport users; and
 - (e) Any other factors bearing on the matter of which the Administrator is aware.
- (4) When the Administrator determines that a wildlife hazard management plan is needed, the certificate holder shall formulate and implement a plan using the ecological study as a basis. The plan shall:
- (a) Be submitted to, and approved by, the Administrator prior to implementation; and
 - (b) Provide measures to alleviate or eliminate wildlife hazards to air carrier operations.
- (5) The plan shall include at least the following:
- (a) The persons who have authority and responsibility for implementing the plan.
 - (b) Priorities for needed habitat modification and changes in land use identified in the ecological study, with target dates for completion.
 - (c) Requirements for and, where applicable, copies of local, state, and Federal wildlife control permits.
 - (d) Identification of resources to be provided by the certificate holder for implementation of the plan.
 - (e) Procedures to be followed during air carrier operations, including at least:
 - Assignment of personnel responsibilities for implementing the procedures;
 - Conduct of physical inspections of the movement area and other areas critical to wildlife hazard management sufficiently in advance of air carrier operations to allow time for wildlife controls to be effective;
 - Wildlife control measures; and
 - Communication between the wildlife control personnel and any air traffic control tower in operation at the airport.





- (f) Periodic evaluation and review of the wildlife hazard management plan for:
 - Effectiveness in dealing with the wildlife hazard; and
 - indications that the existence of the wildlife hazard, as previously described in the ecological study, should be reevaluated.
 - (g) A training program to provide airport personnel with the knowledge and skills needed to carry out the wildlife hazard management plan required by paragraph (d) of this section.
- (6) Notwithstanding the other requirements of this section, each certificate holder shall take immediate measures to alleviate wildlife hazards whenever they are detected.
- (7) FAA Advisory Circulars in the 150 series contain standards and procedures for wildlife hazard management at airports which are acceptable to the Administrator.

The Airport currently has an extensive wildlife hazard management program implemented at the facility. The Airport developed this program in cooperation with the United States Department of Agriculture – Wildlife Services. Within the past few years the airport has implemented an extensive clearing and grubbing operation, installed 8 and 10 ft perimeter security fencing, has secured a deer and bird depredation permit, added further dispersement techniques including pyrotechnics and Airport Border Collies, in an effort to control wildlife and reduce the potential for bird/animal strikes, engine ingestion, etc. for aircraft during arrival or departure operations.

u. Sec. 139.339 Airport condition reporting.

- (1) Each certificate holder shall provide for the collection and dissemination of airport condition information to air carriers.
- (2) In complying with paragraph (1) of this section, the certificate holder shall utilize the NOTAM system and, as appropriate, other systems and procedures acceptable to the Administrator.
- (3) In complying with paragraph (1) of this section, the certificate holder shall provide information on the following





airport conditions which may affect the safe operations of air carriers:

- (a) Construction or maintenance activity on movement areas, safety areas, or loading ramps and parking areas.
 - (b) Surface irregularities on movement areas or loading ramps and parking areas.
 - (c) Snow, ice, slush, or water on the movement area or loading ramps and parking areas.
 - (d) Snow piled or drifted on or near movement areas contrary to Sec. 139.313.
 - (e) Objects on the movement area or safety areas contrary to Sec. 139.309.
 - (f) Malfunction of any lighting system required by Sec. 139.311.
 - (g) Unresolved wildlife hazards as identified in accordance with Sec. 139.337.
 - (h) Non-availability of any rescue and firefighting capability required in Secs. 139.317 and 139.319.
 - (i) Any other condition as specified in the airport certification manual or airport certification specifications, or which may otherwise adversely affect the safe operations of air carriers.
- (4) FAA Advisory Circulars in the 150 series contain standards and procedures for using the NOTAM system for dissemination of airport information which are acceptable to the Administrator.

[52 FR 44282, Nov. 18, 1987; 53 FR 4258, Feb. 12, 1988]

Airport personnel provide condition/activity reports on a daily basis and as necessary. The Airport recently purchased a new Mu-meter for measuring friction status of pavement surfaces. The information is issued via NOTAM and through the Air Traffic Control Tower (during operation). The airport also has an automated weather observing system that transmits real time weather conditions through the automated terminal information system or ATIS. Construction activities, surface conditions, snow/ice management issues,





parking/ramp conditions, wild life hazards, non-availability of any fire fighting /rescue capability, and other conditions that may adversely affect safe operations at the airport.

v. Sec. **139.341** Identifying, marking, and reporting construction and other unserviceable areas.

(1) Each certificate holder shall:

(a) Mark and, if appropriate, light in a manner acceptable to the Administrator:

- Each construction area and unserviceable area, which is on or adjacent to any movement area or any other area of the airport on which air carrier aircraft may be operated;
- Each item of construction equipment and each construction roadway, which may affect the safe movement of aircraft on the airport; and
- Any area adjacent to a NAVAID that, if traversed, could cause derogation of the signal or the failure of the NAVAID.

(b) Provide procedures, such as a review of all appropriate utility plans prior to construction, for avoiding damage to existing utilities, cables, wires, conduits, pipelines, or other underground facilities.

(2) FAA Advisory Circulars in the **150** series contain standards and procedures for identifying and marking construction areas which are acceptable to the Administrator,

Airport Construction Zones or other unserviceable areas of the airfield will need to be marked, lighted, and NOTAM provided by the Airport and/or its subcontractors in accordance with FAA requirements as the need arises.

w. Sec. **139.343** Noncomplying conditions.

(1) Unless otherwise authorized by the Administrator, whenever the requirements of Subpart D of this part cannot be met to the extent that uncorrected unsafe conditions exist on the airport, the certificate holder shall limit air carrier operations to those portions of the airport not rendered unsafe by those conditions.





The airport will need to address non-complying conditions when/if they arise.

C. General Recommendations For Compliance With Part 139 Requirements

1. Revise Airport Certification Manual (ACM) in accordance with FAA review comments and requirements for approval of the ACM by the Administrator.
2. Provide blast fence along the northerly and easterly portions of the ramp to protect aircraft on the adjacent ramp areas from jet blast. Note this item can be implemented at a later date if the service provider anticipates regional type jets in its fleet mix. For turboprop fleets, blast fence may be omitted depending on the proximity of adjacent parked aircraft.
3. The airport is in the process of completing additional security fencing and gates to secure the airfield in accordance with the ACM and the Airport's Security Plan. These items should
4. The Alarm system that has been purchased by the airport should be installed in the North Wing Terminal to meet security requirements. It is understood that this item is planned for installation within the next several months.

D. General Recommendations

1. The North Wing Terminal ramp areas (adjacent to the building) should be paved to facilitate the operation and movement of ground support equipment (tugs, trucks, etc.), passenger loading/unloading ramps, and passenger loading/unloading from aircraft. See drawing Exhibit 3.
2. Develop Baggage Handling area as a future phase (likely Phase 2) depending on number of aircraft (fleet size and mix) and schedule of operations. The airport has completed preliminary planning regarding a baggage handling facility to be added to the north end of the North Wing Terminal area. See Exhibit 4.
3. A passenger bridge will be necessary for larger aircraft. This can be installed at a later date, as demand (or aircraft size) requires. This will likely be a Phase 2 or Phase 3 item.
4. Develop plan for handling de-icing fluid (storage and disposal). De-icing capabilities could be addressed by means of an above ground storage tank (with secondary containment) and a small vacuum truck to collect spend de-icing fluid from the ramp. Aircraft could be de-iced at the "gates" or in a designated area of either the northerly ramp or main ramp/apron. Fluid collected by the vacuum truck would need proper disposal. It may be feasible to dispose of the fluid at the nearby



TRAVEL QUESTIONNAIRE RESULTS

Travel Survey - Cincinnati Municipal Airport - Lunken Field
No Sort - Survey Format Order

City - Destination	Seats	No Companies Responding	Average Seats Per Company	Highest Freq Per Company
Cleveland, OH	1399	50	28	200
Louisville, KY	252	44	6	50
Milwaukee, WI	667	38	18	59
Indianapolis, IN	271	40	7	58
Chicago, IL	3826	87	44	545
Detroit, MI	1139	94	12	173
Washington, DC	1965	83	24	266
St. Louis, MO	1430	80	18	151
Buffalo, NY	241	38	6	25
Albany, NY	281	17	17	200
Huntington, WV	50	10	5	10
Toronto, Canada	196	8	25	80
Nashville, TN	74	4	19	46
Baltimore, MD	50	1	50	50
Memphis, TN	124	4	31	50
Charlotte, NC	28	3	9	12
Charleston, SC	48	1	48	48
Atlanta, GA	165	5	33	70
Columbus, OH	20	1	20	20
Myrtle Beach, SC	22	1	22	16
Gainesville, FL	50	1	50	50
Boston, MA	78	3	26	50
Manchester, NH	50	1	50	50
Pittsburgh, PA	304	9	34	100
Greenville, SC	36	1	36	30
Toledo, OH	100	1	100	100
Minneapolis, MN	152	6	25	80
Birmingham, AL	25	1	25	25
Petoskey, MI	10	1	10	10
Knoxville, TN	50	1	50	50
Newark, NJ	28	2	14	20
New York, NY	450	4	113	116
Orlando, FL	183	3	61	150
Bentonville, PA	14	1	14	14
	13778			

Travel Survey - Cincinnati Municipal Airport - Lun Field
Sort by Seats Projected

City - Destination	Seats	No. Companies Responding	Average Seats Per Company	Highest Freq. Per Company
Chicago, IL	3826	87	44	545
Washington, DC	1965	83	24	266
St. Louis, MO	1430	80	18	151
Cleveland, OH	1399	50	28	200
Detroit, MI	1139	94	12	173
Milwaukee, WI	667	38	18	59
New York, NY	450	4	113	116
Pittsburgh, PA	304	9	34	100
Albany, NY	281	17	17	200
Indianapolis, IN	271	40	7	58
Louisville, KY	252	44	6	50
Buffalo, NY	241	38	6	25
Toronto, Canada	1%	8	25	80
Orlando, FL	183	3	61	150
Atlanta, GA	165	5	33	70
Minneapolis, MN	152	6	25	80
Memphis, TN	124	4	31	50
Toledo, OH	100	1	100	100
Boston, MA	78	3	26	50
Nashville, TN	74	4	19	46
Baltimore, MD	50	1	50	50
Gainesville FL	50	1	50	50
Manchester, NH	50	1	50	50
Knoxville, TN	50	1	50	50
Huntington, WV	50	10	5	10
Charleston, SC	48	1	48	48
Greenville, SC	36	1	36	30
Charlotte, NC	28	3	9	12
Newark, NJ	28	2	14	20
Birmingham, AL	25	1	25	25
Myrtle Beach, SC	22	1	22	16
Columbus, OH	20	1	20	20
Bentonville, PA	14	1	14	14
Petoskey, MI	10	1	10	10
	13778			

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Page 2

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Sheet 1 of 1

Page 3

SUBJECT:

Page 4

PERCENT OF TRAVEL FROM CINCINNATI

REPORT: KBCNTTRY

THE KROGER COMPANY

M A CORPORATE TRAVEL SERVICES

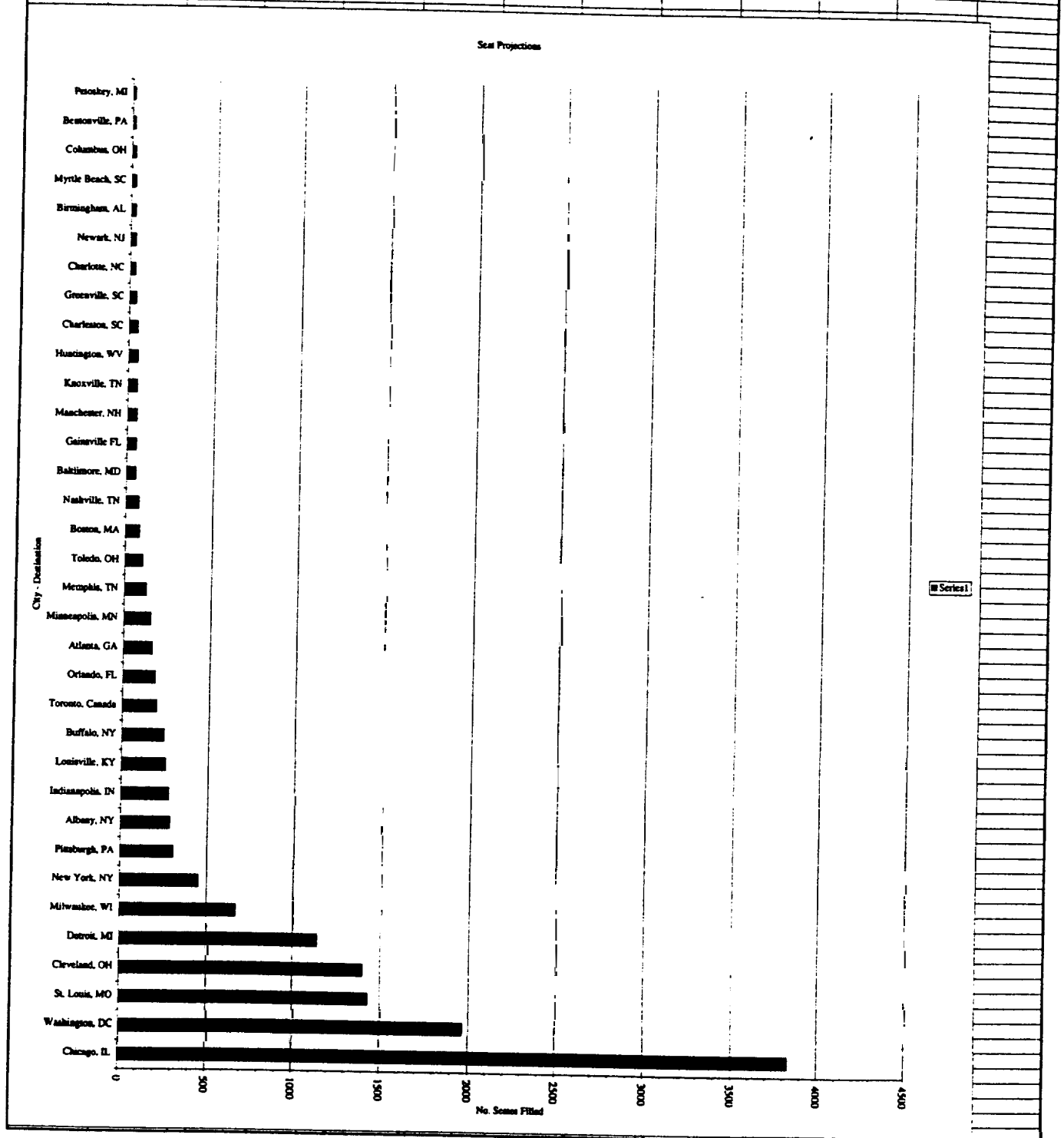
6/26/2000

1 of 1

6/1/1999 TO 5/31/2000

RANK	DESTINATION CITY PAIR	% TKTED SEGMENTS	TICKETED SEGMENT3	% SEGMENT VALUE	TOTAL SEG VALUE
1	DTW	5.1 %	170	4.7 %	\$39,171.12
2	ORD -	5.0 %	169	1.3 %	\$11,303.60
3	DCA	1.9 %	64	1.8 %	\$15,134.94
4	STL	1.3 %	45	0.4 %	\$3,736.31
5	MDW -	0.6 %	20	0.2 %	\$1,982.45
6	MKE	0.5 %	16	0.4 %	\$3,410.75
7	BWI	0.4 %	15	0.5 %	\$4,543.66
8	BUF	0.2 %	7	0.3 %	\$2,322.77
9	IAD	0.2 %	6	0.1 %	\$1,101.84
10	CLE	0.1 %	2	0.1 %	\$419.50
11	IND	0.0 %	1	0.0 %	\$285.58
12	SDF	0.0 %	0	0.0 %	\$0.00
SPECIFIC CITIES:		15.4 %	515	10.0 %	\$83,412.52
GRAND TOTALS:		100.0 %	3,347	10.0 %	\$837,745.85

Travel Survey - Cincinnati Municipal Airport - Lunken Field
Table 1 - Seats by City - Destination



FINANCIALS FOR 2001,2002

REPORT CODE NAME: CFSF0104

REPORT DISTRIBUTION SYSTEM

FINAL AGENCY REPORTS

FOR JANUARY, 2001

STATEMENT OF BALANCE
APPROPRIATED FUNDS

LYNN WAGNER (691)

POCKET PAGE NUMBER

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CITY OF CINCINNATI - DEPARTMENT OF FINANCE
DIVISION OF ACCOUNTS AND AUDITS
STATEMENT OF BALANCES
APPROPRIATED FUNDS
AS OF 12/31/2000

FY	FND	AGY	DBJT	ORIGINAL AUTHORIZATION	ADJUSTED AUTHORIZATION	EXPENDITURES AMOUNT	UNEXPENDED BALANCE	ENCUMBRANCE AMOUNT	UNENCUMBERED BALANCE	PRE-ENCUMBERED AMOUNT
GENERAL AVIATION FUND										
DEPT. OF GENERAL SERVICES										
DIV OF GENERAL AVIATION										
1999	104	245	7200	54,246.49	54,246.49	2,694.36	51,552.13	.00	51,552.13	.00
1999	104	245	7300	19,931.17	19,931.17	2,518.91	17,412.26	.00	17,412.26	.00
1999	104	245	7400	595.26	595.26	20.00	575.26	.00	575.26	.00
1999	104	245	7600	6,899.00	6,899.00	6,851.00	48.00	.00	48.00	.00
DIVISION TOTALS:				81,671.92	81,671.92	12,084.27	69,587.65	.00	69,587.65	.00
DEPARTMENT TOTALS:				81,671.92	81,671.92	12,084.27	69,587.65	.00	69,587.65	.00
PERCENT EXPENDED:				14.8	PERCENT EXPENDED AND ENCUMBERED: 14.8					